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FIG. 1

SIGNAL SEPARATING
APPARATUS

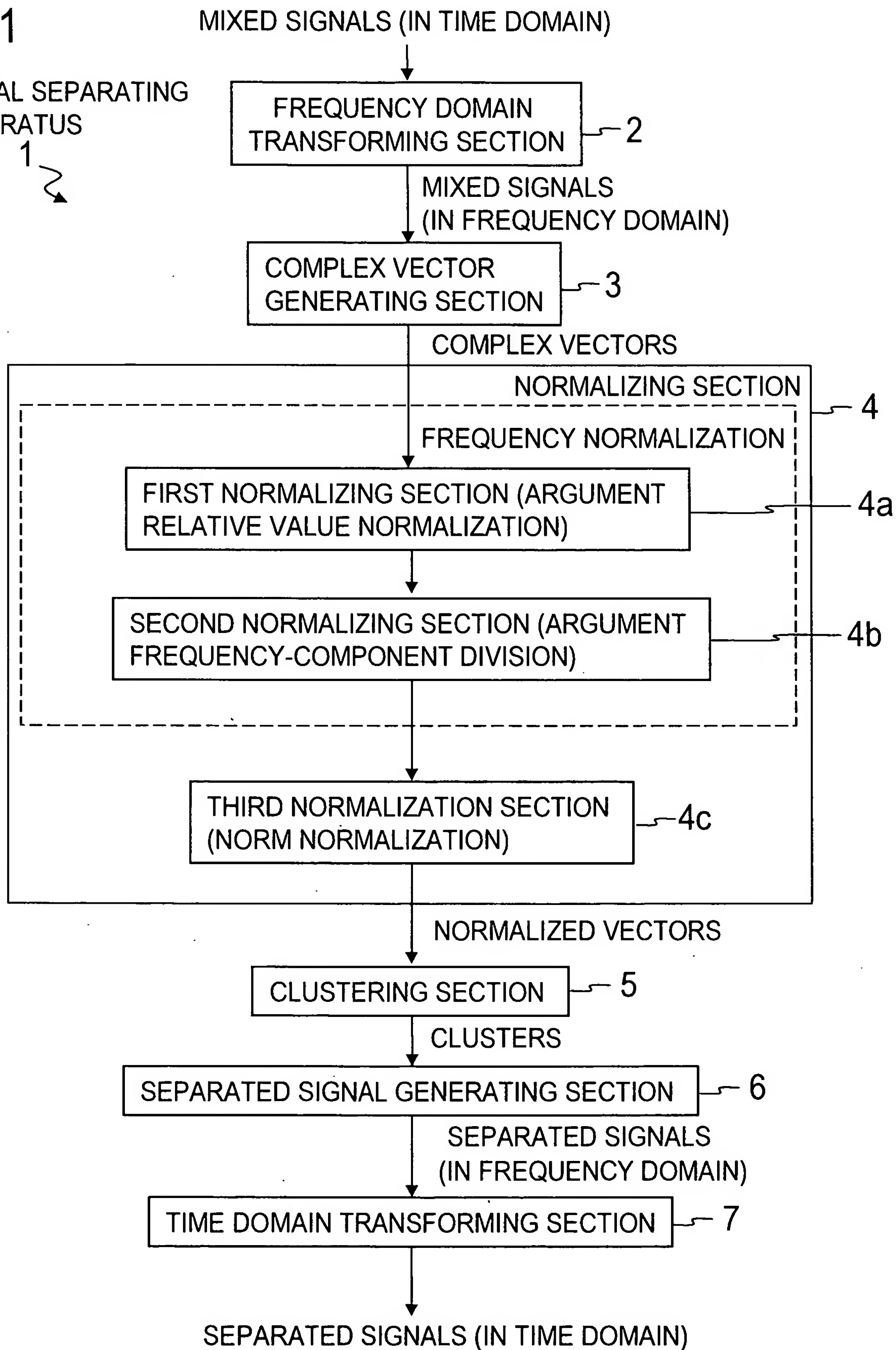
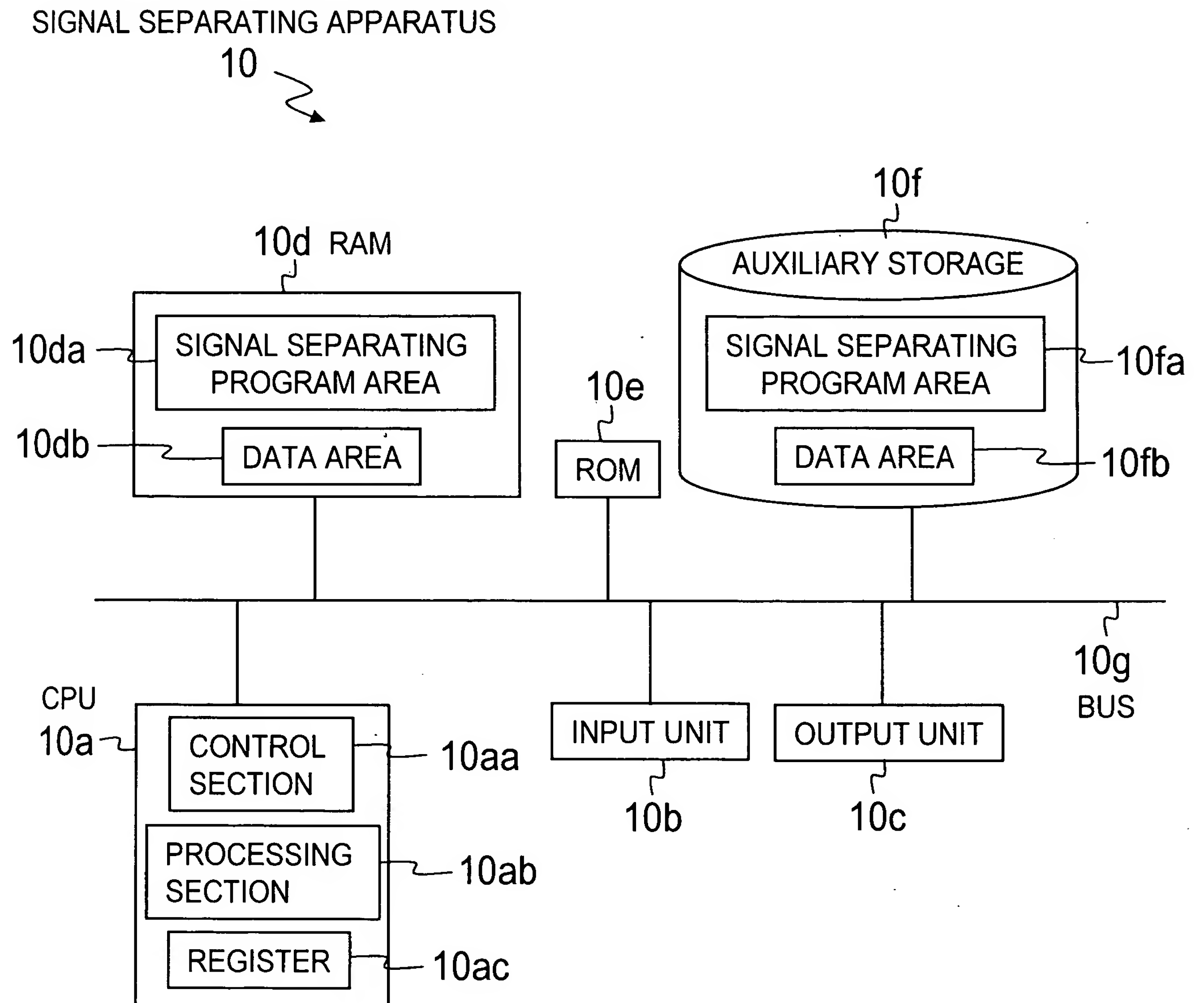


FIG.2



MEMORY AREA

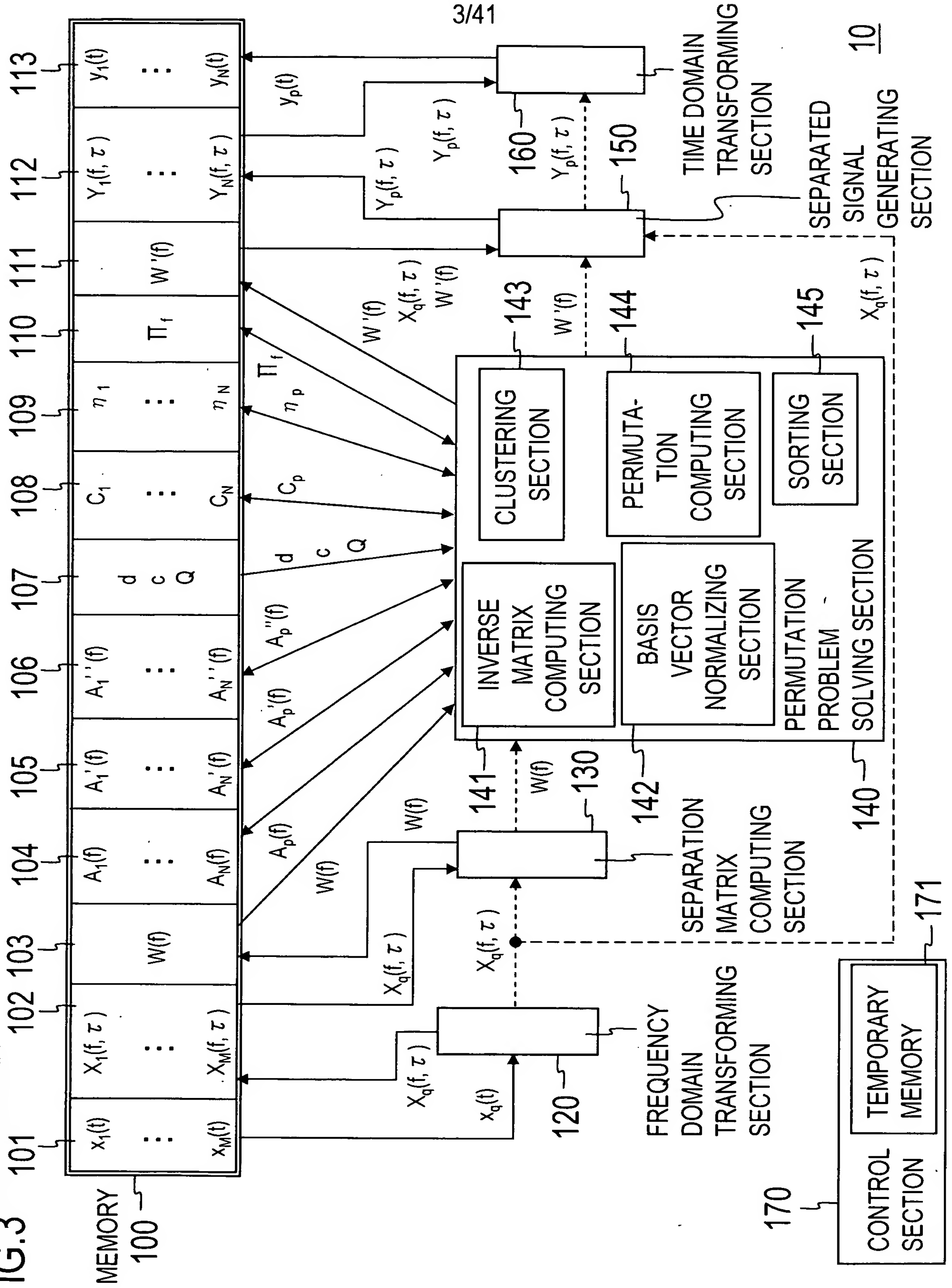


FIG.4A

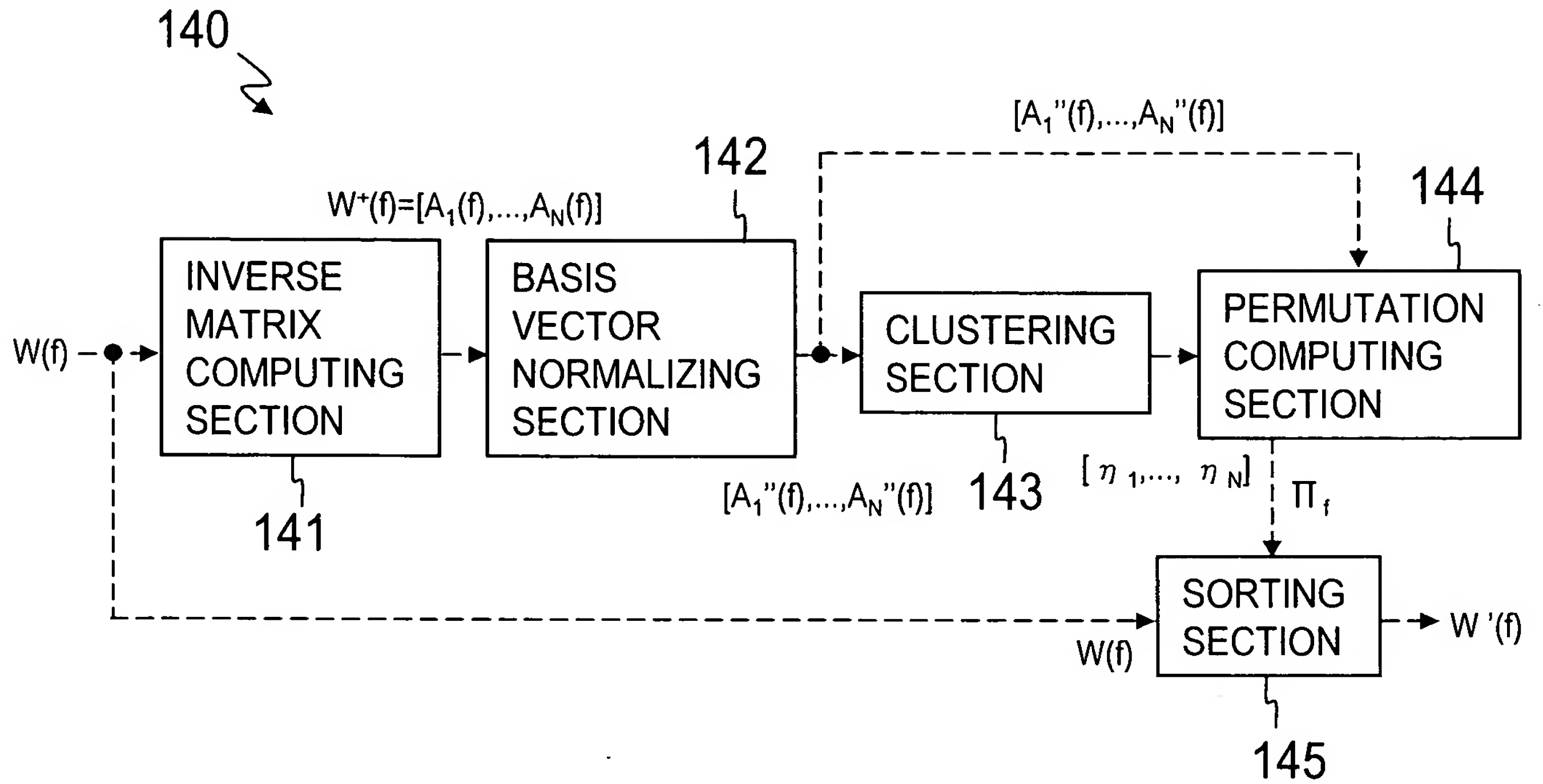


FIG.4B

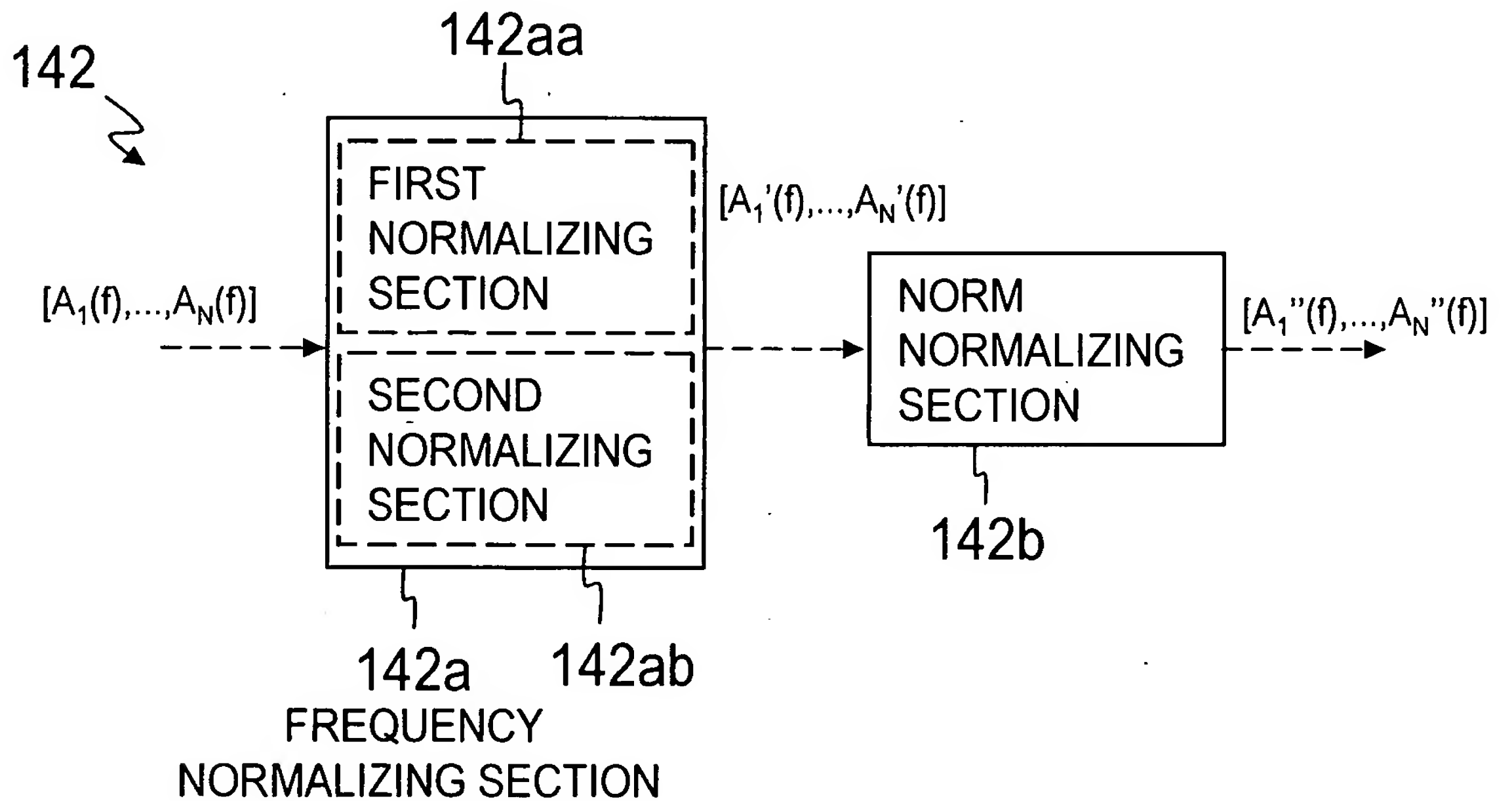
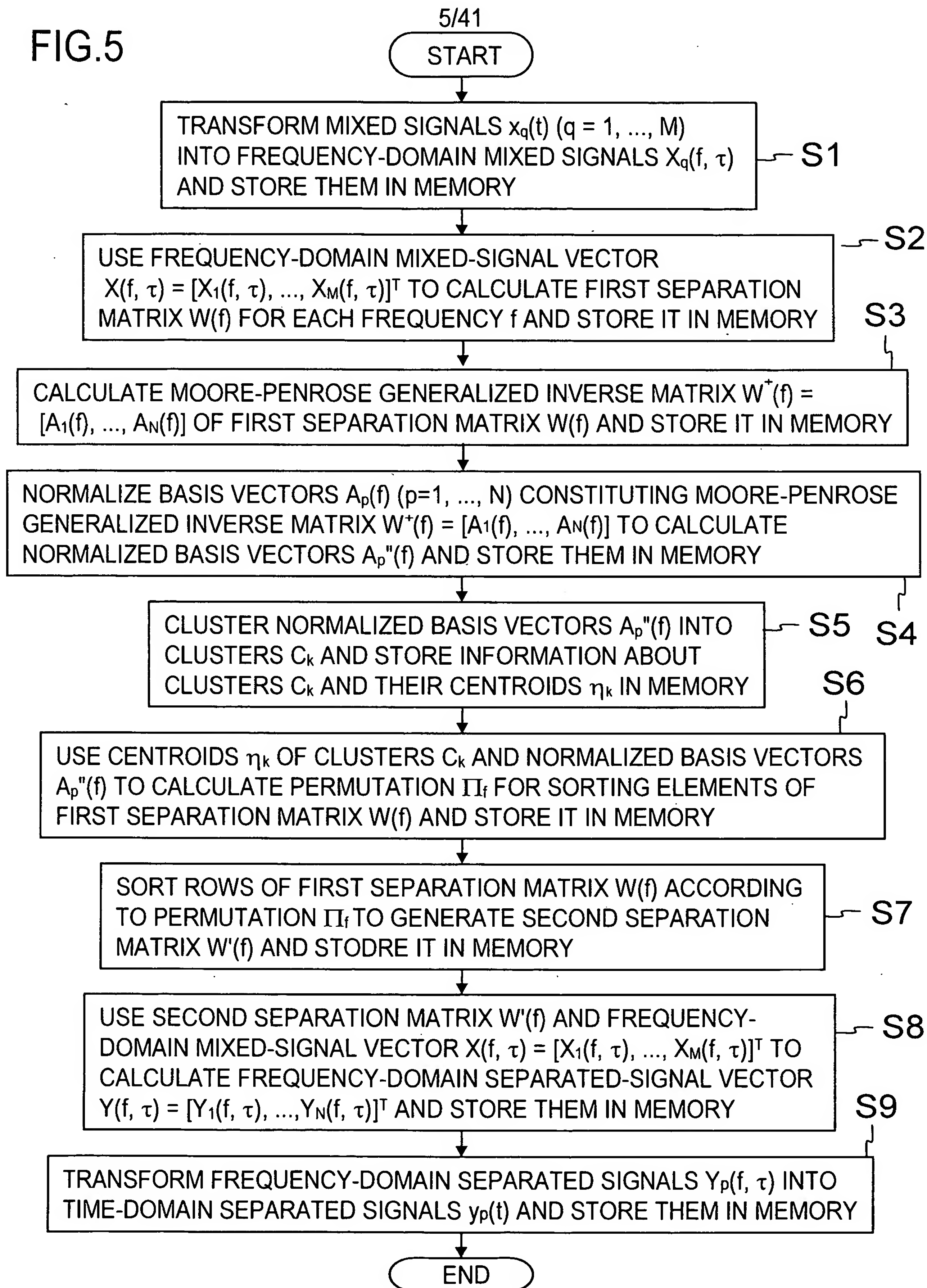
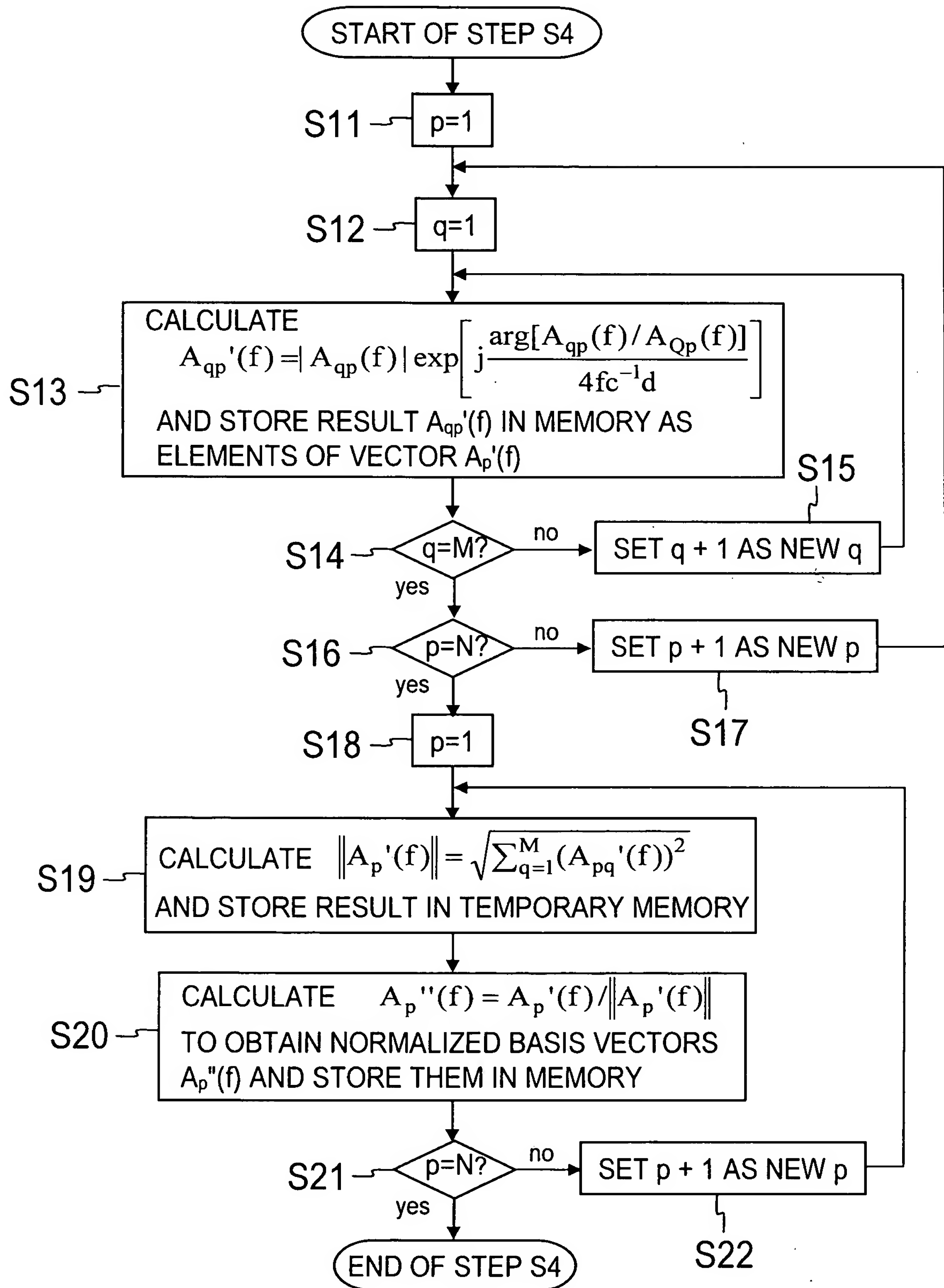


FIG.5



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FIG.6



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FIG.7A

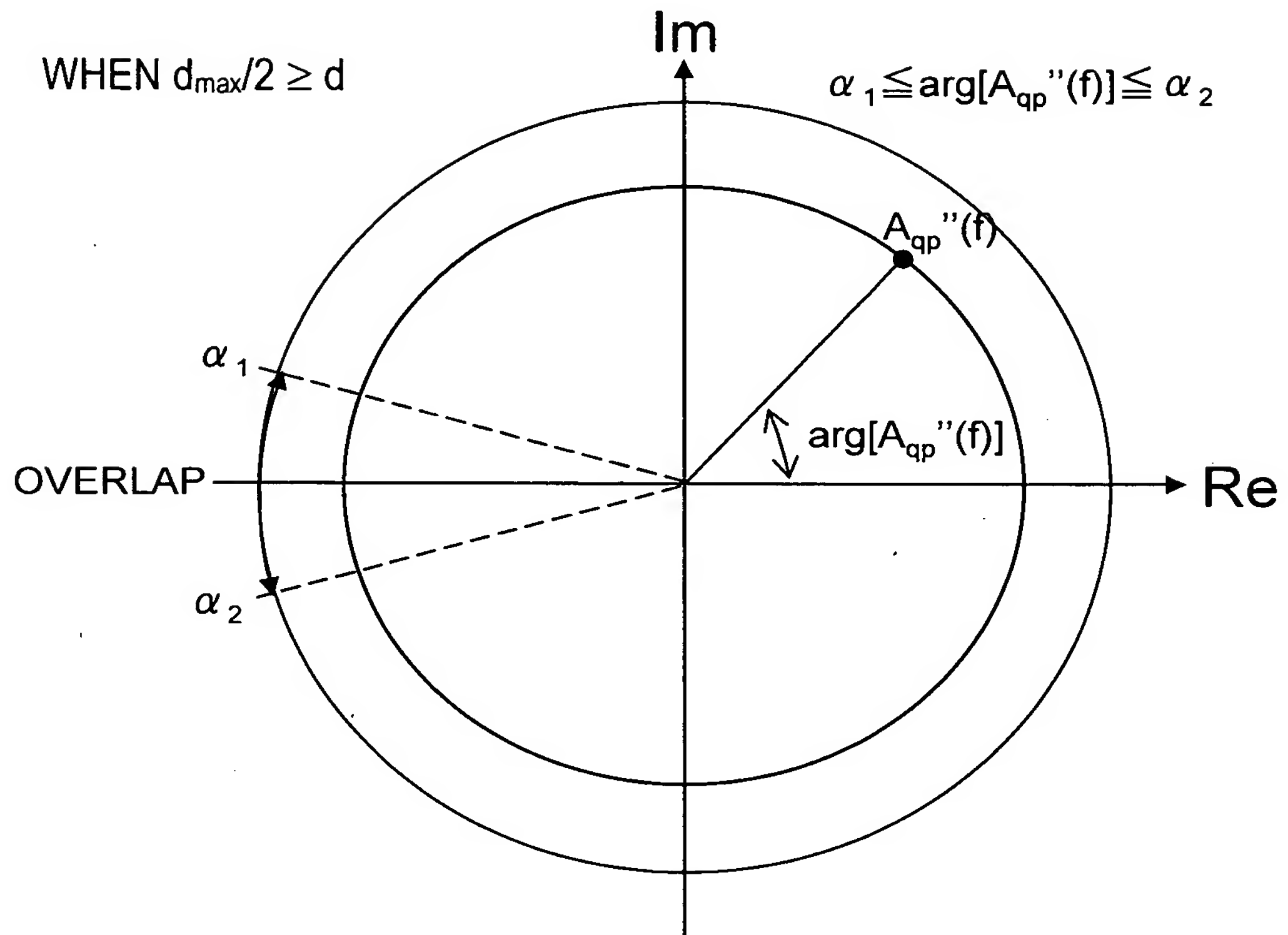


FIG.7B

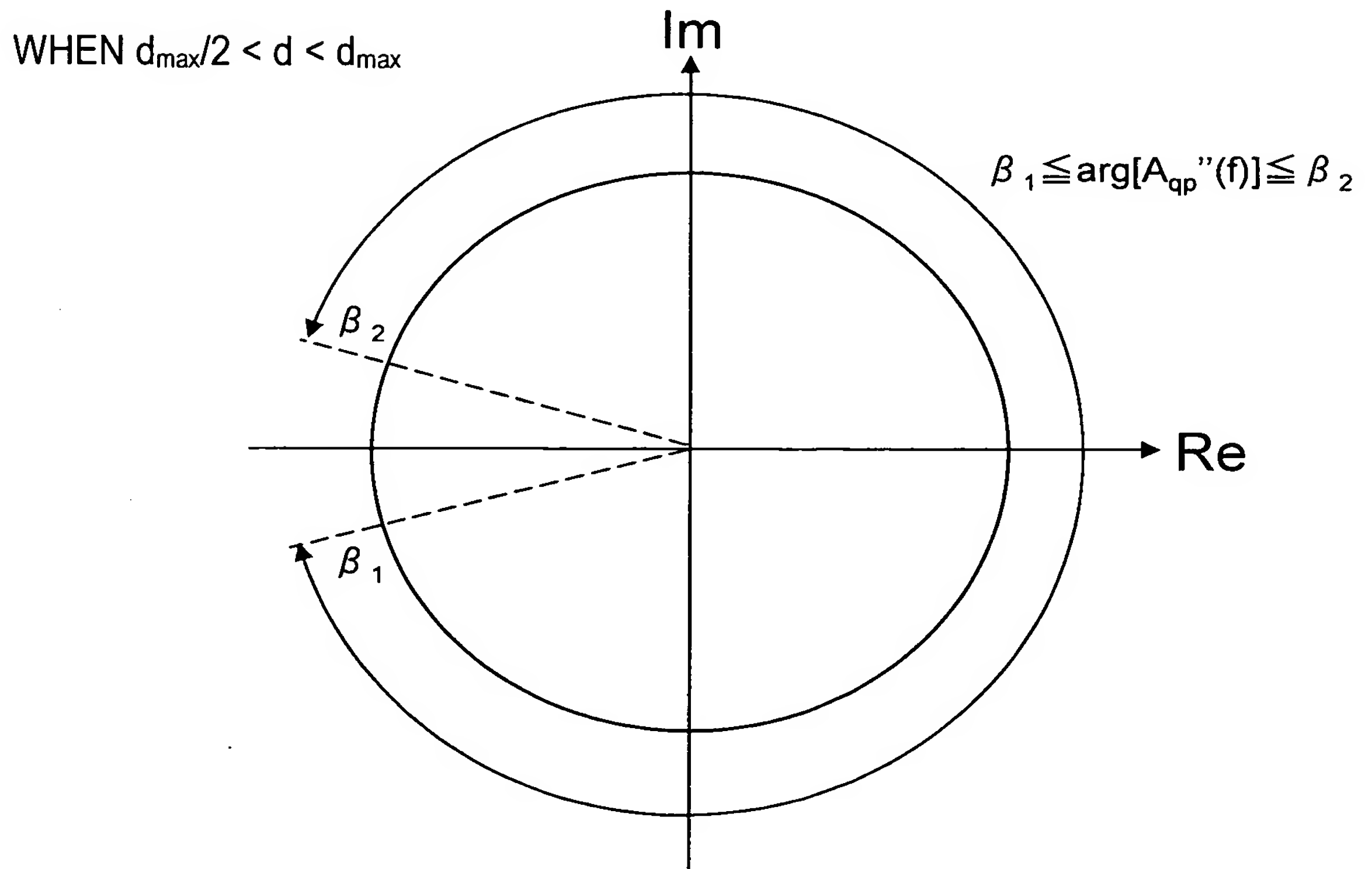


FIG.8A

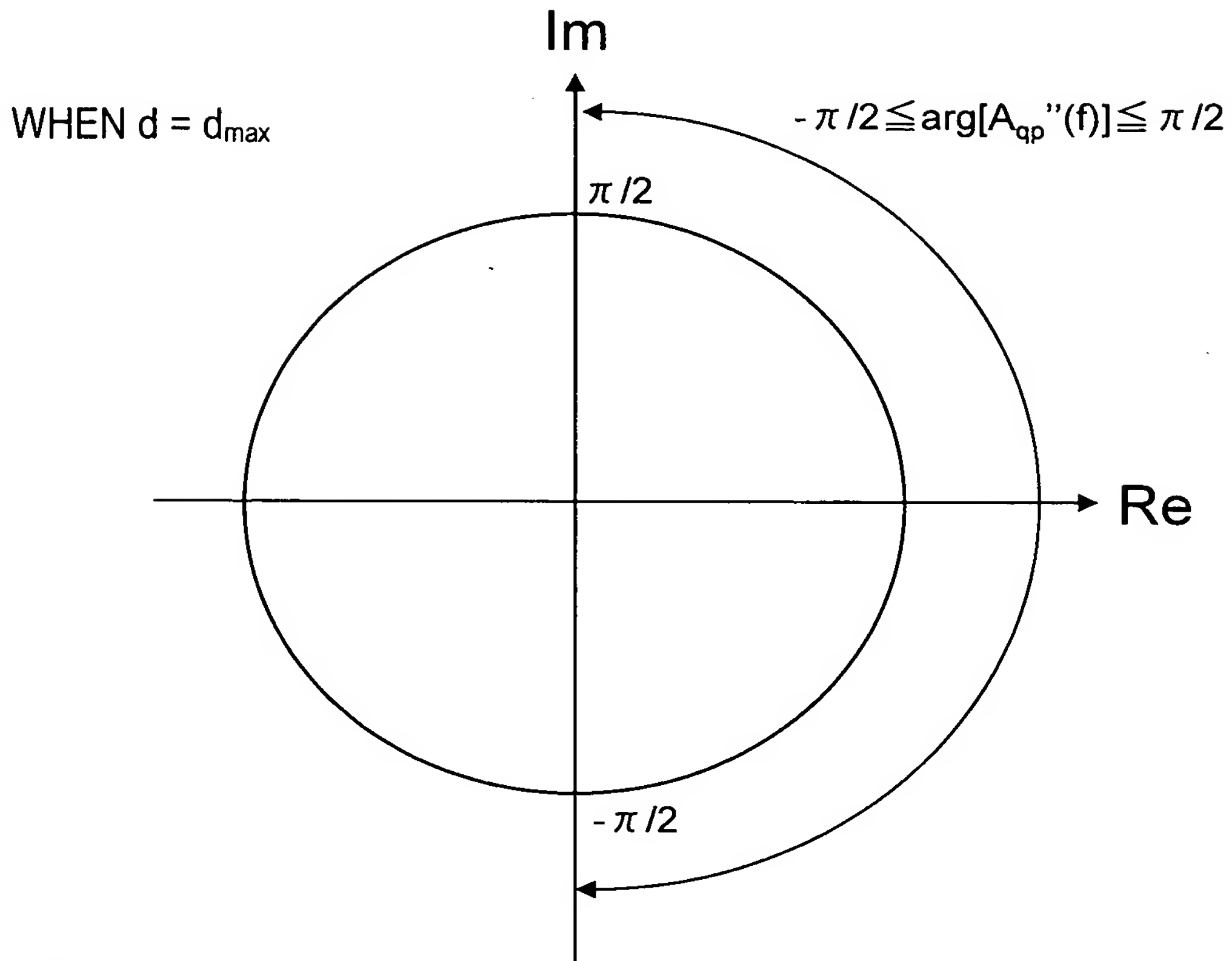
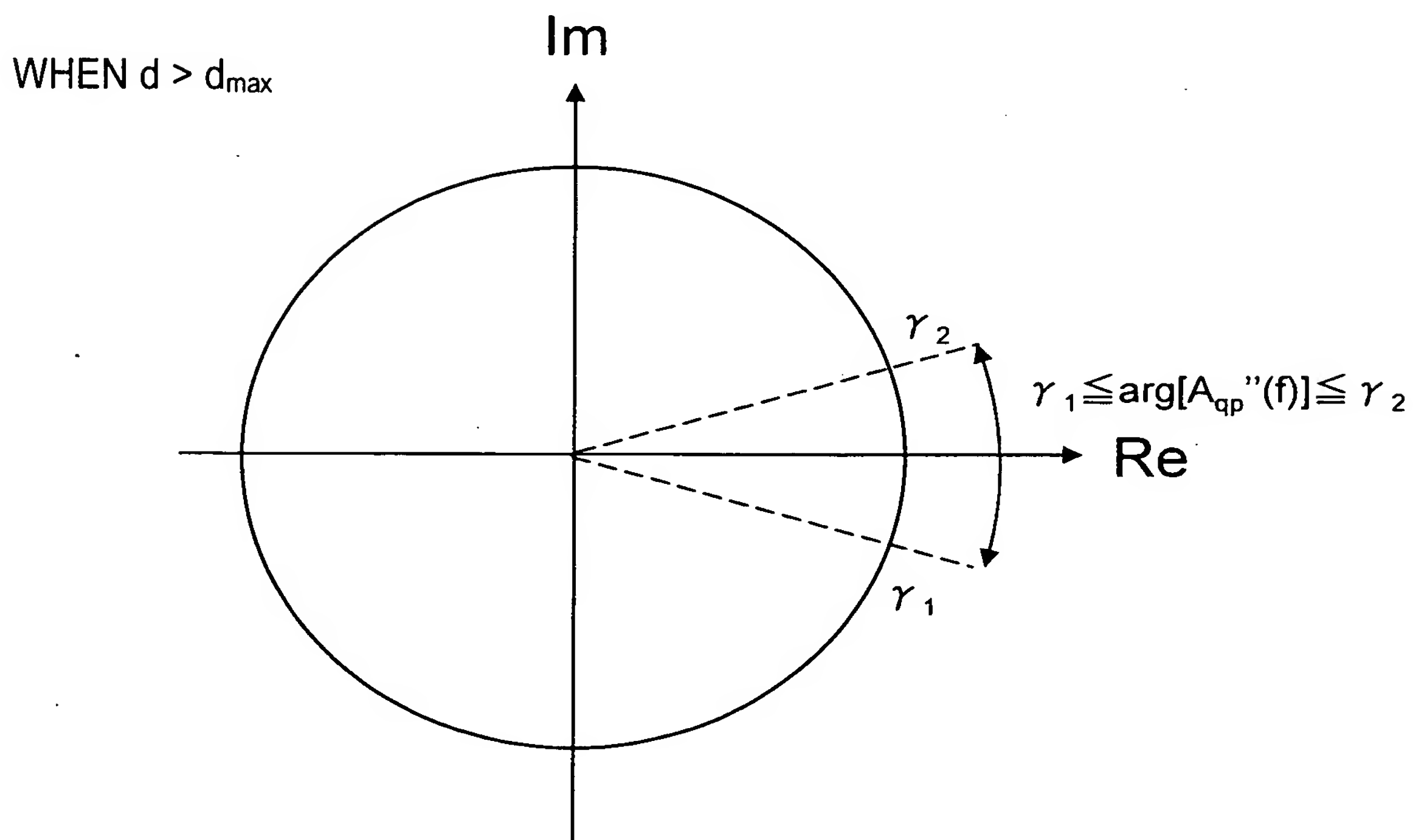


FIG.8B



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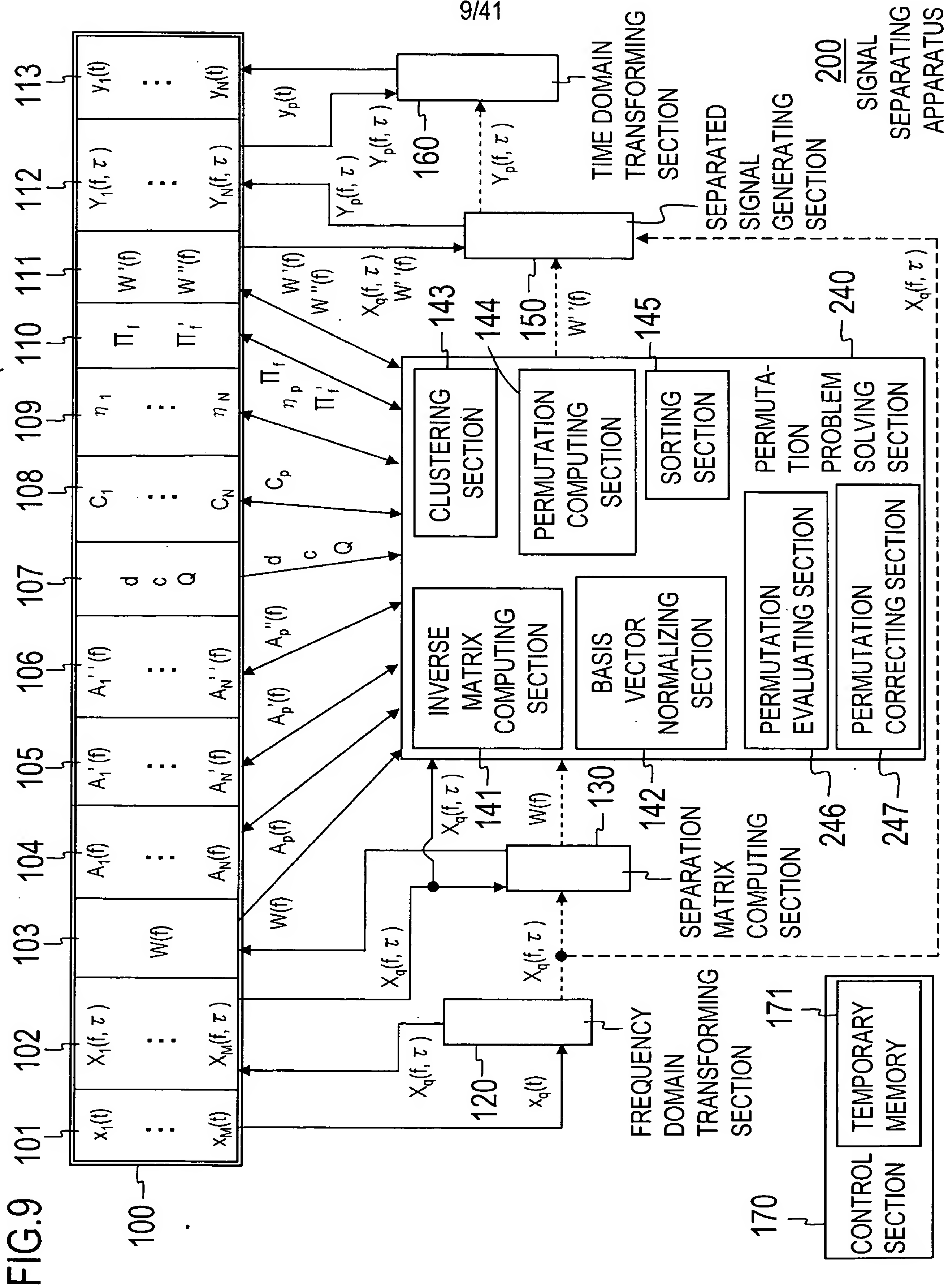


FIG.10A

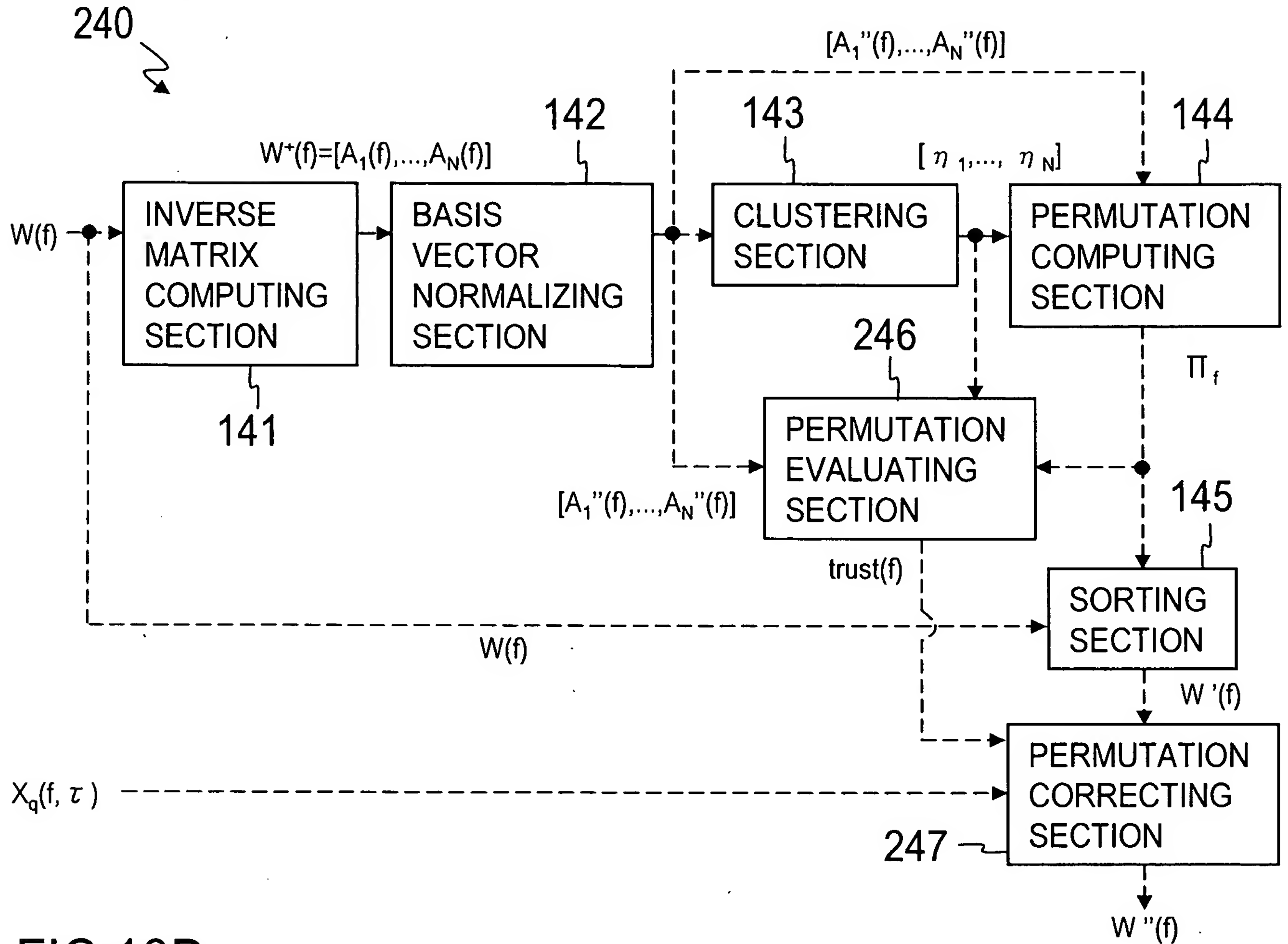


FIG.10B

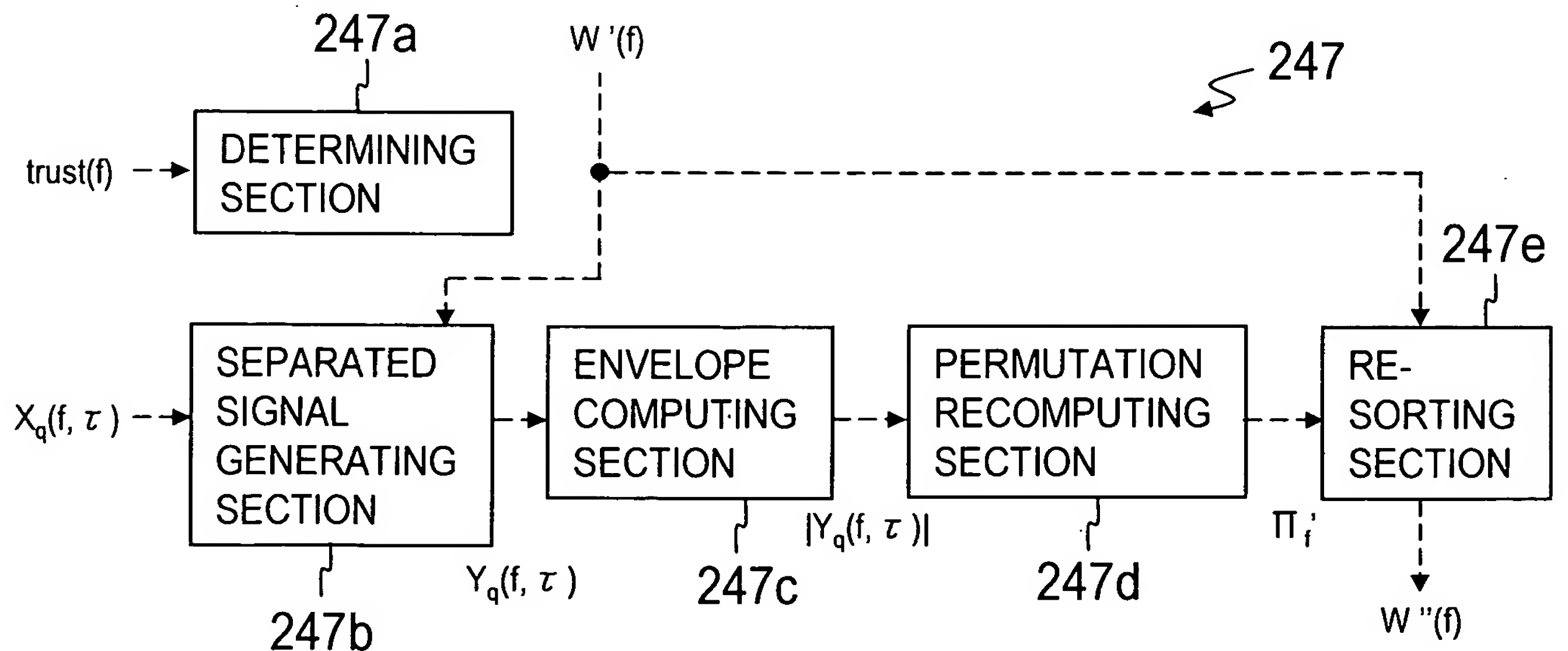
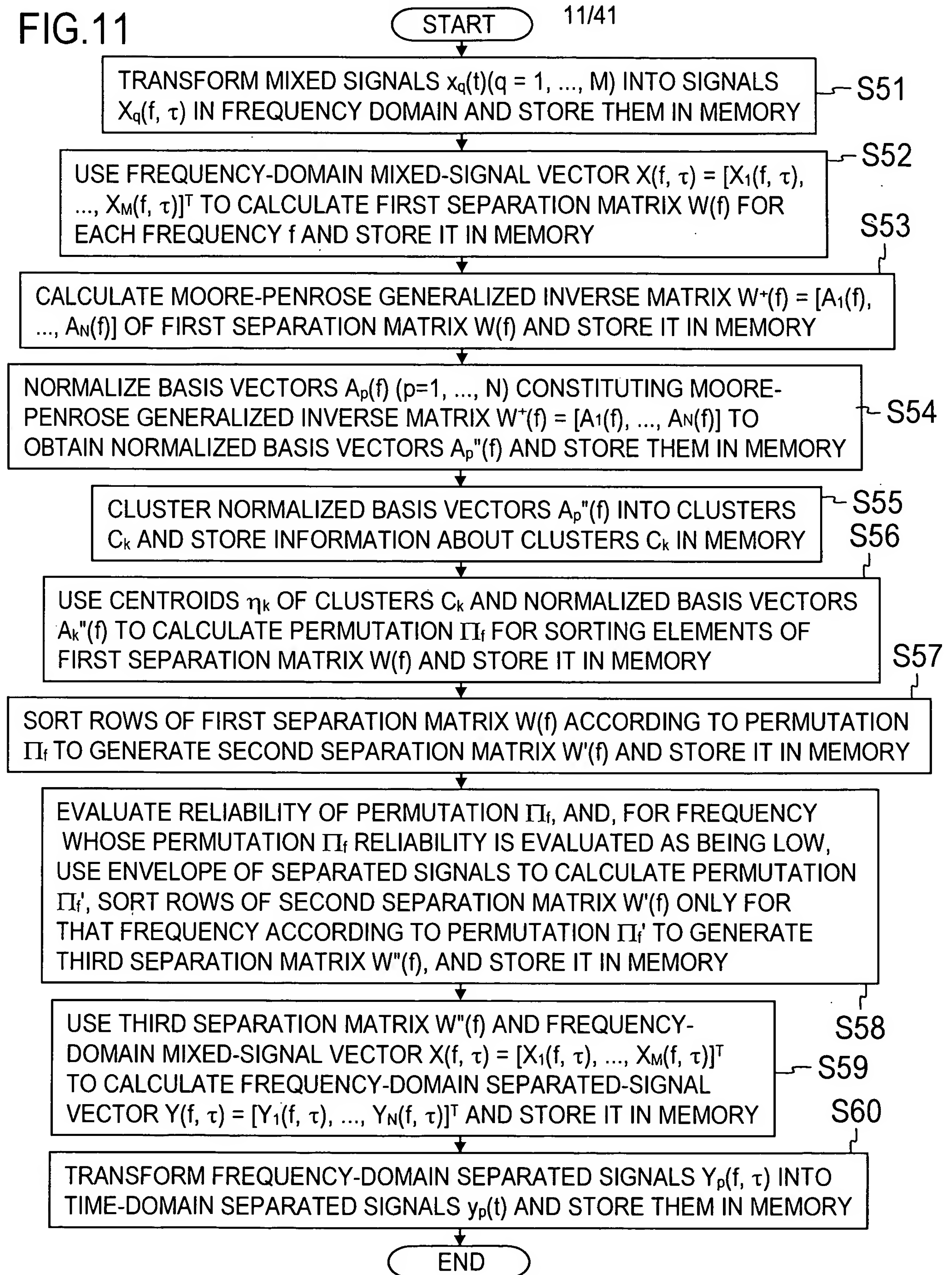


FIG.11

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FIG.12

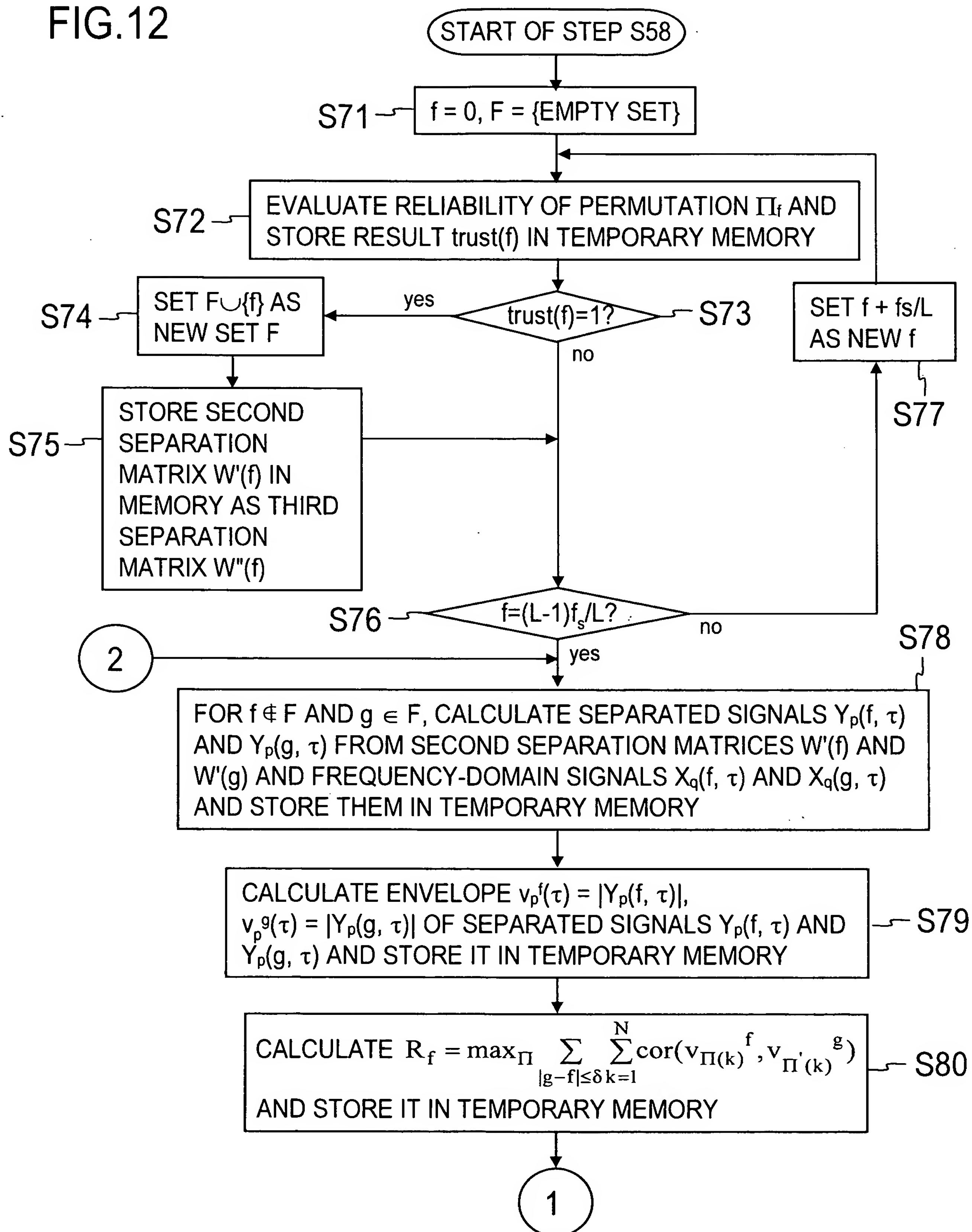


FIG.13

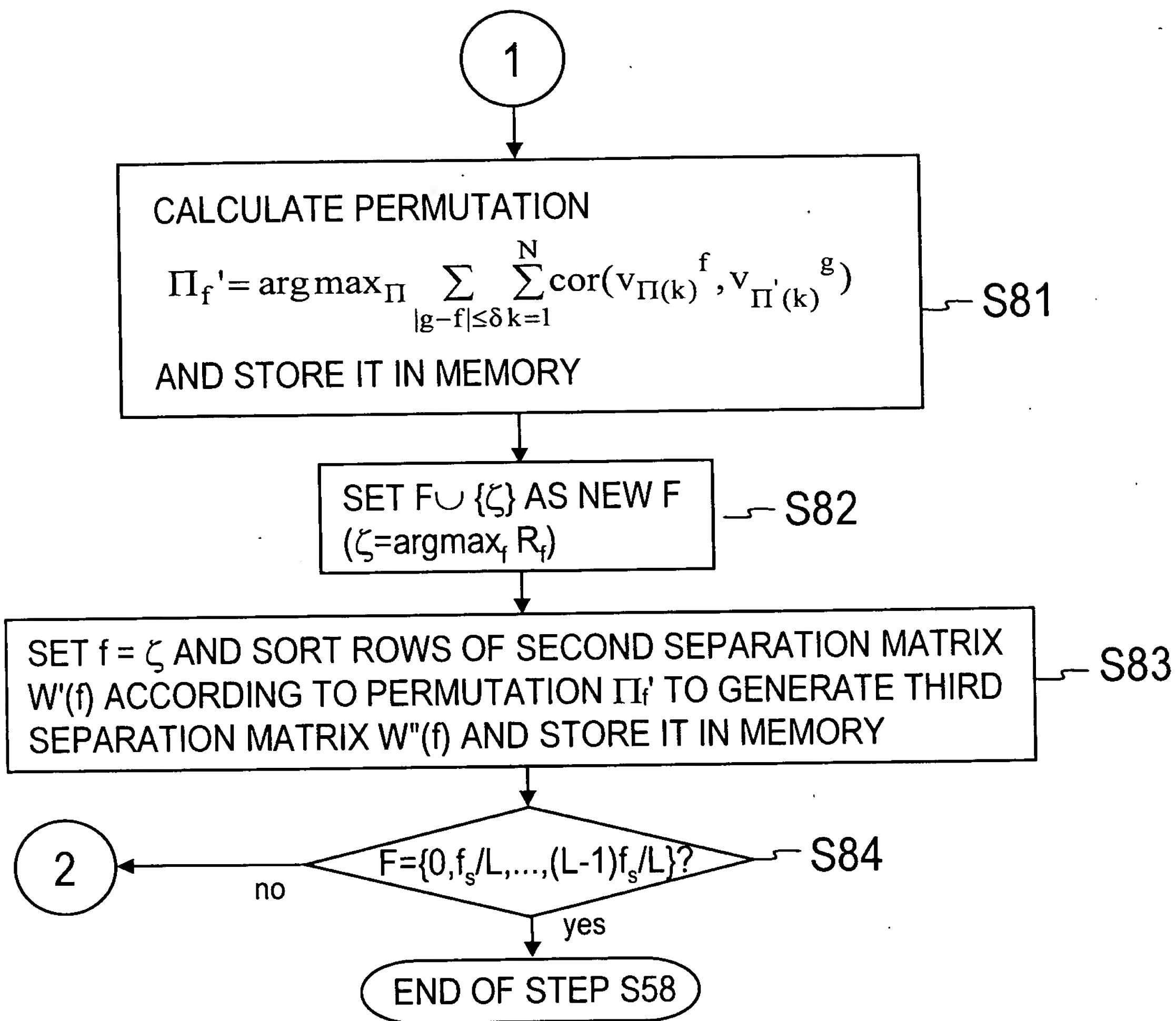


FIG.14A

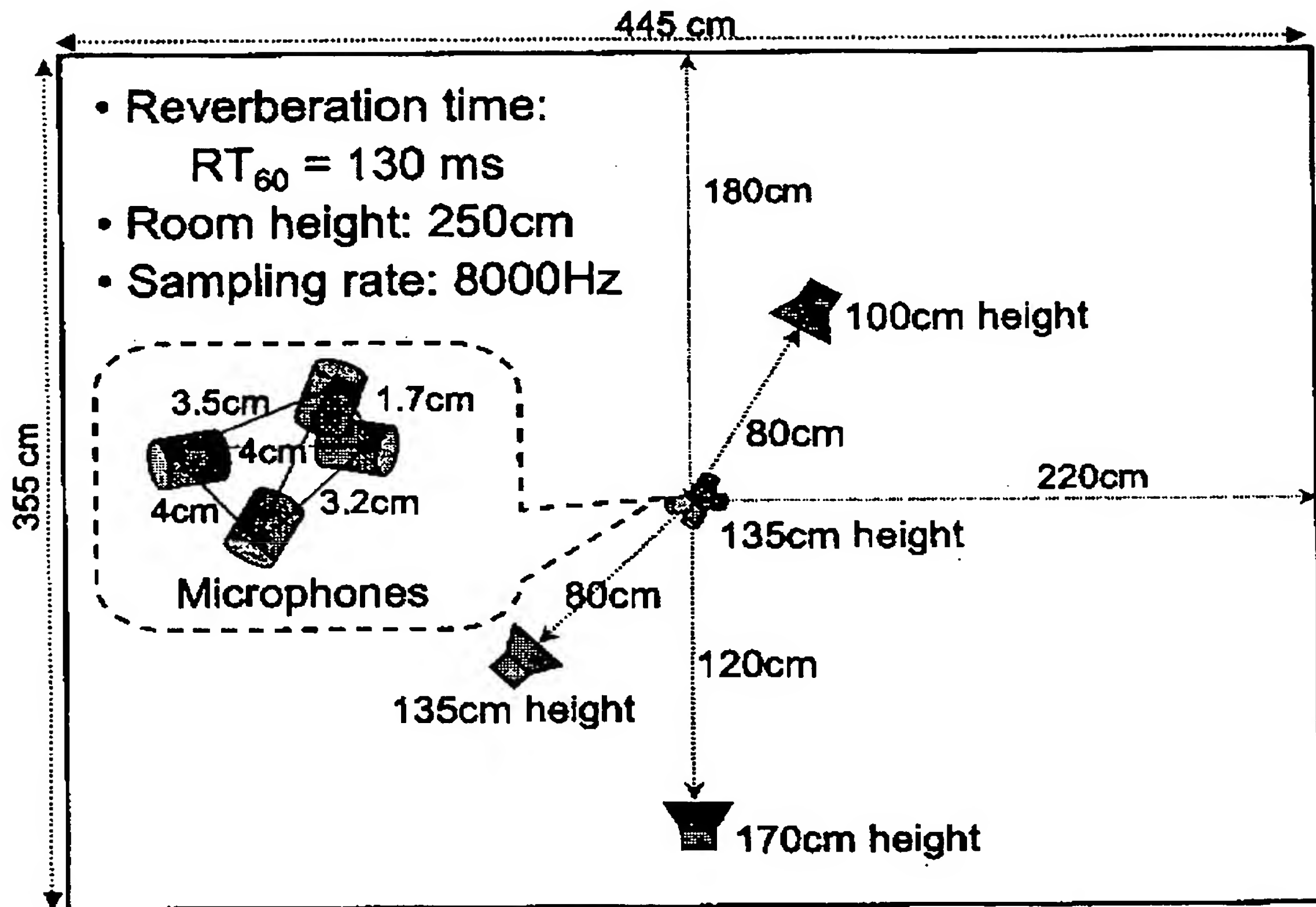


FIG.14B

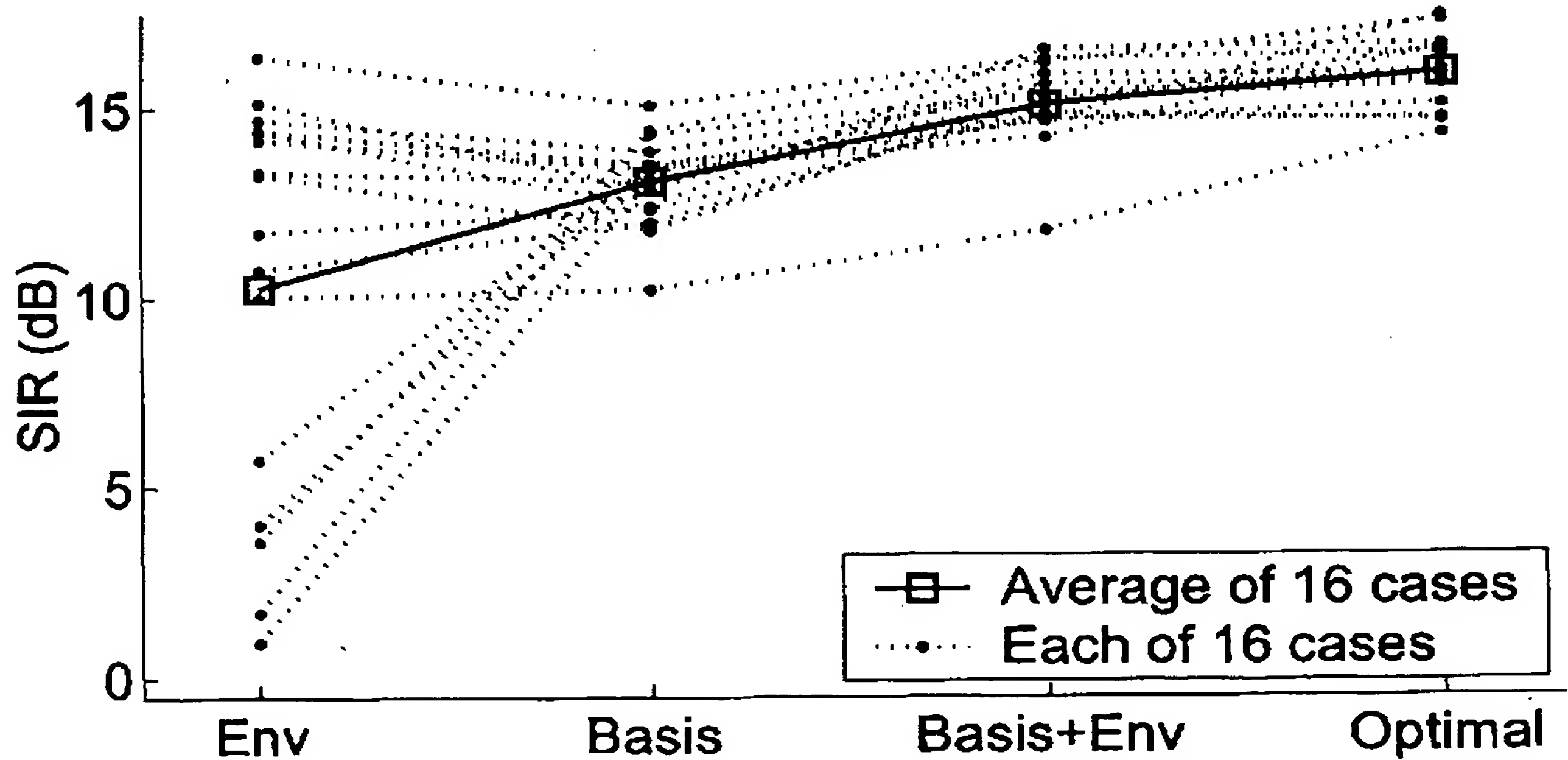


FIG.15A

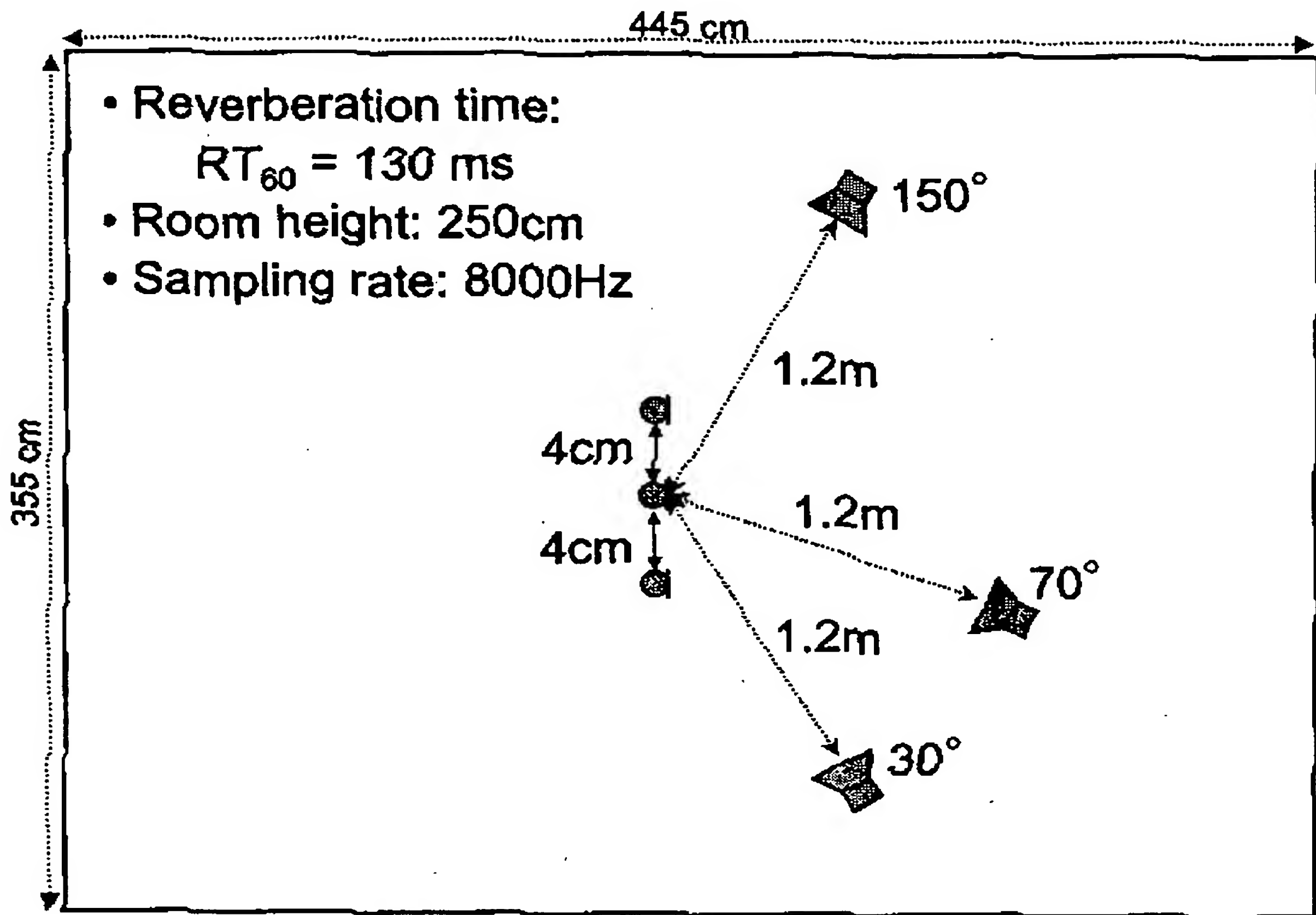


FIG.15B

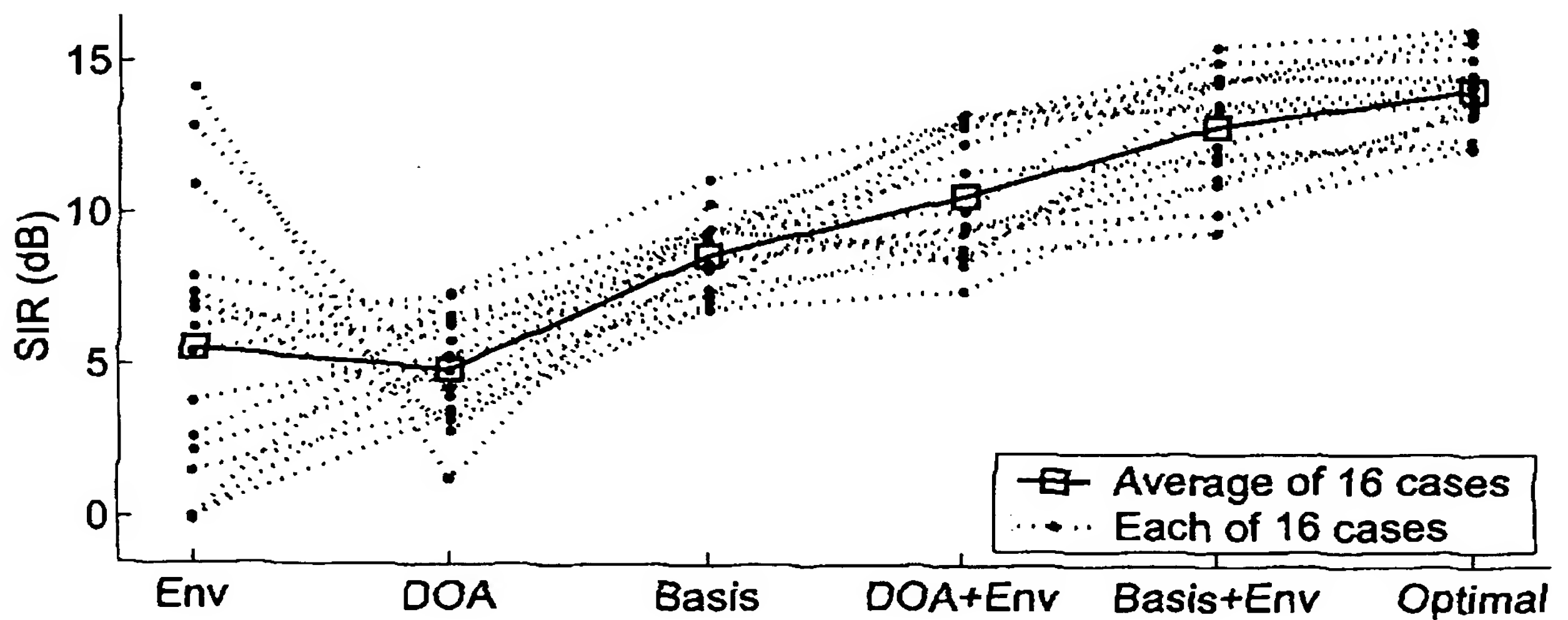
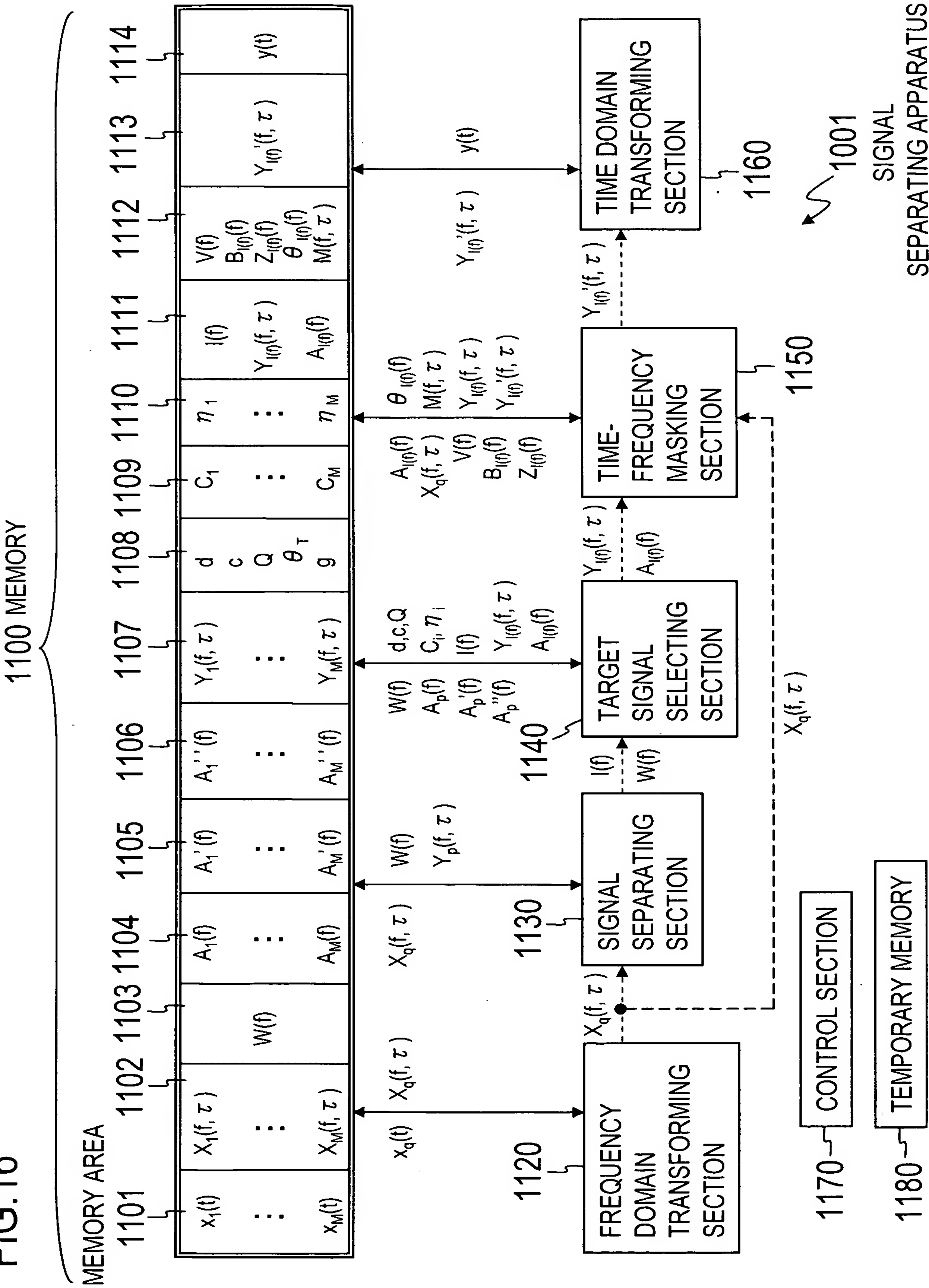


FIG.16



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FIG.17A

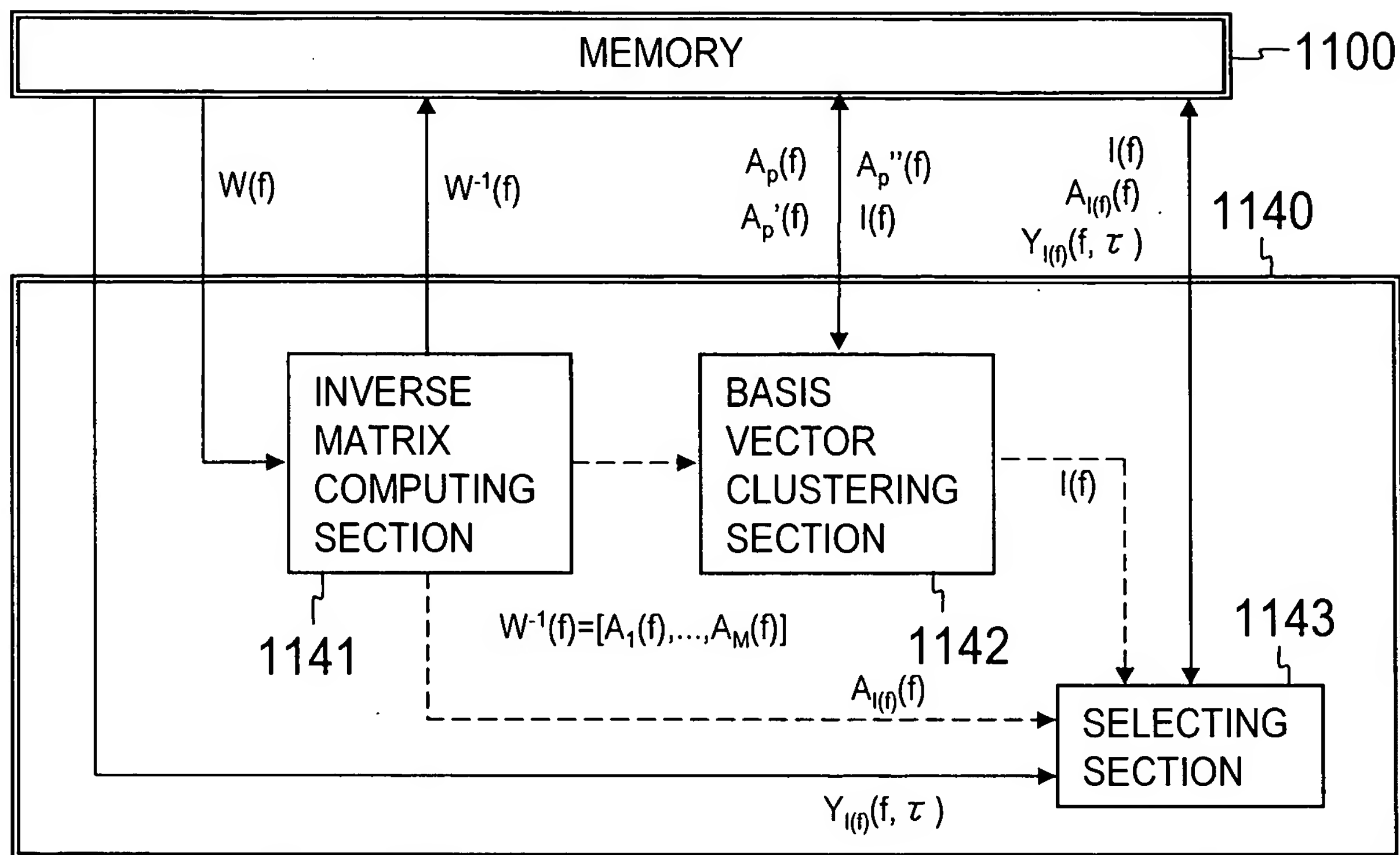


FIG.17B

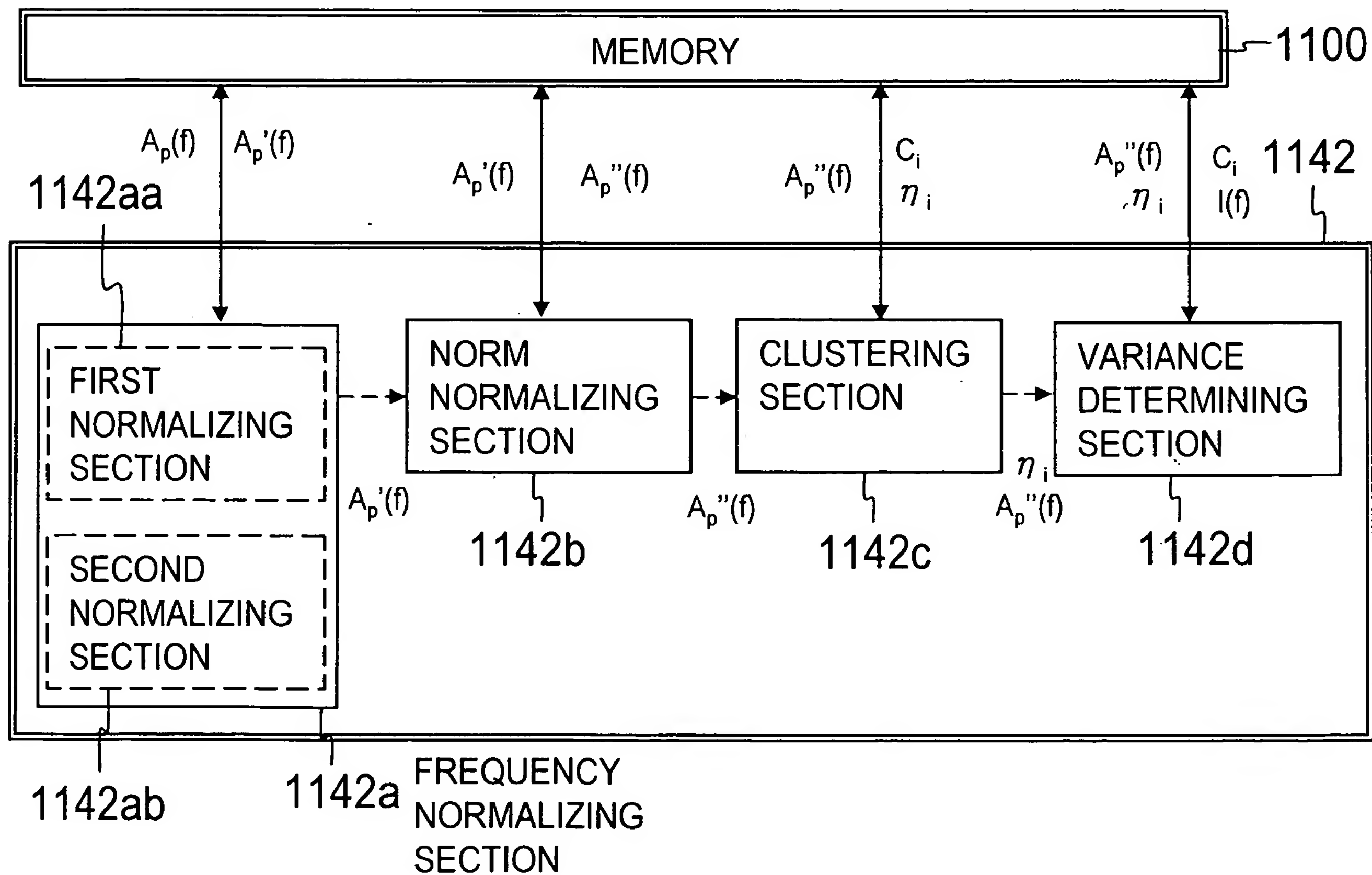


FIG.18A

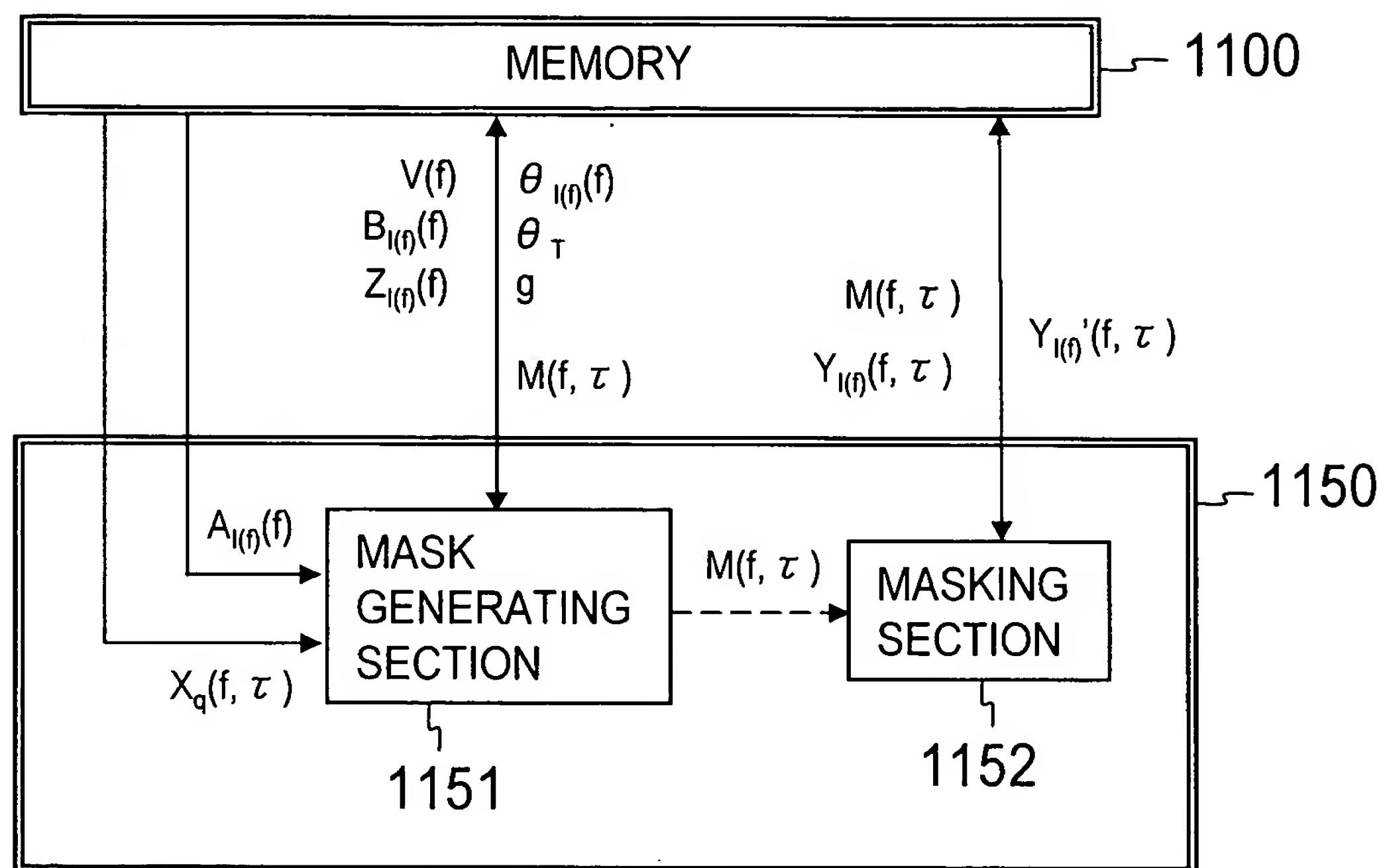


FIG.18B

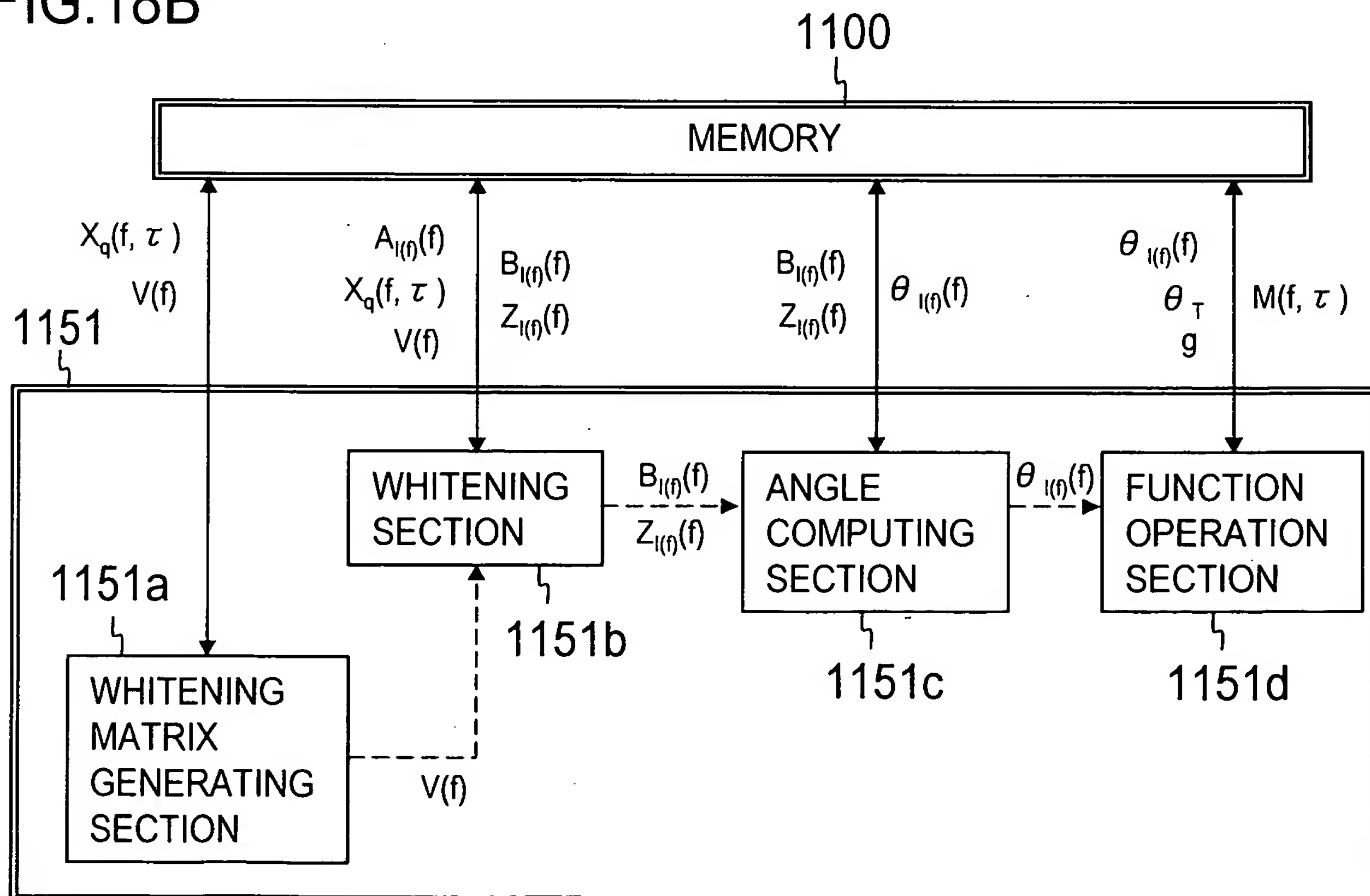


FIG.19

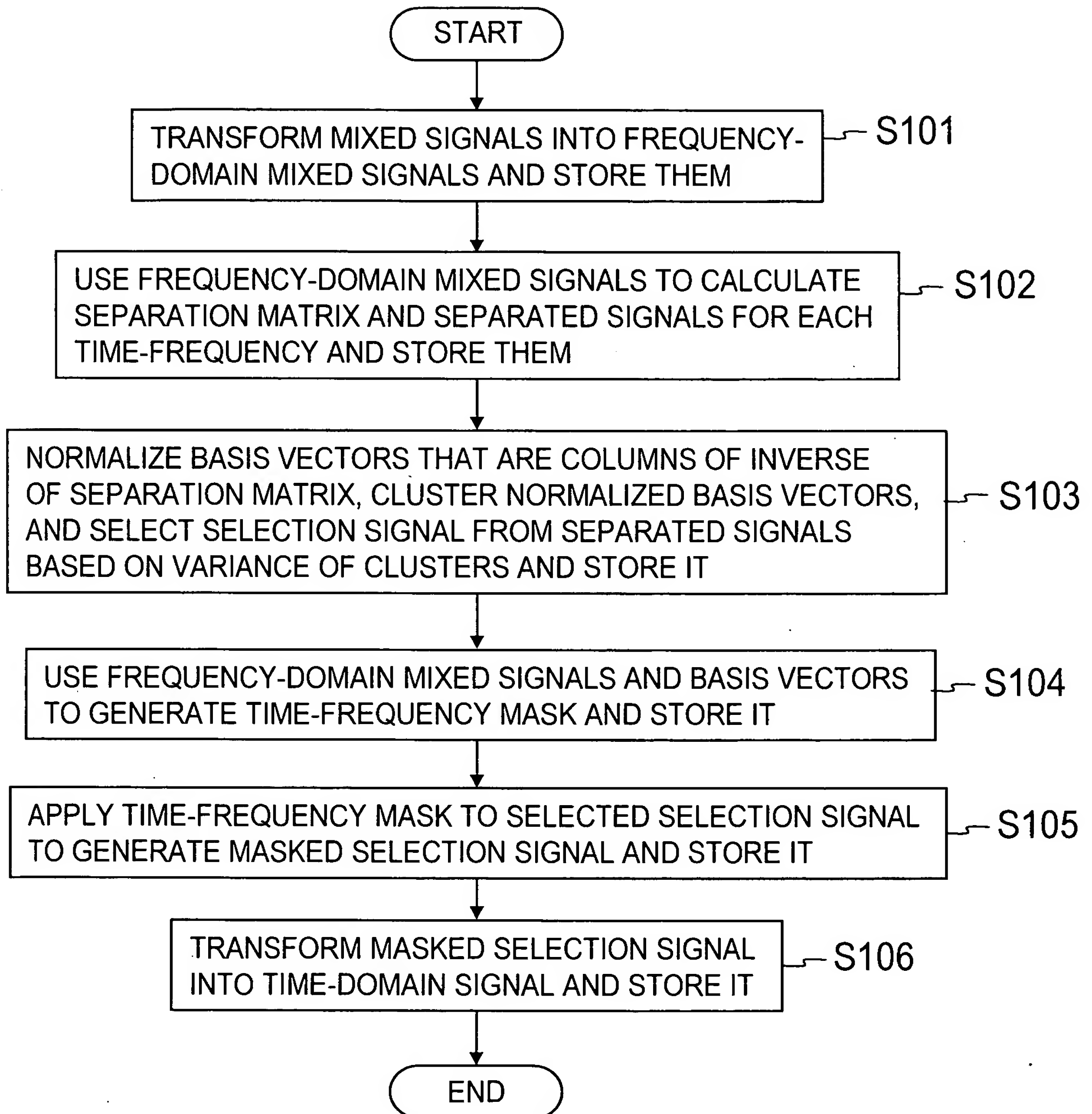


FIG.20

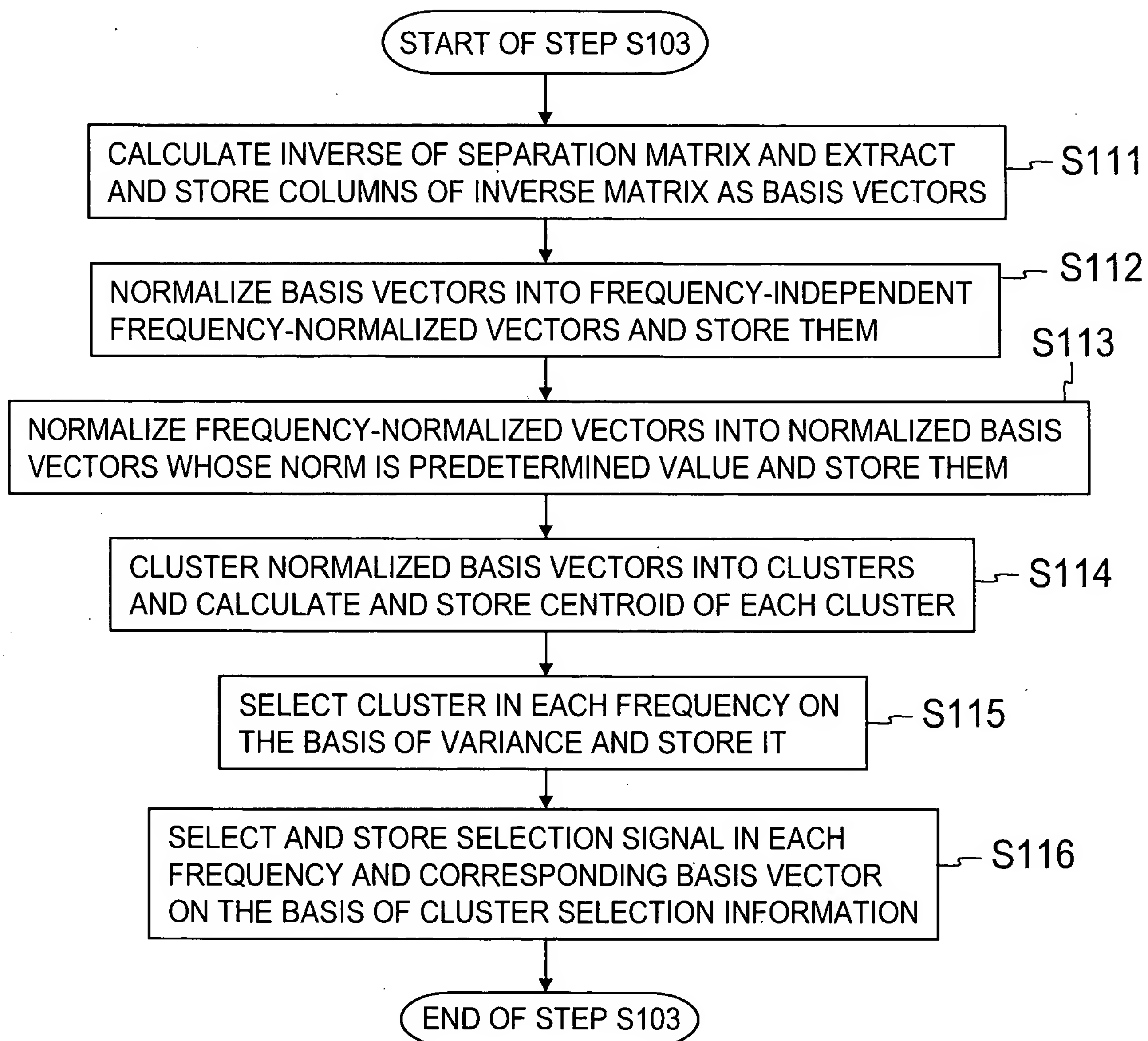


FIG.21A

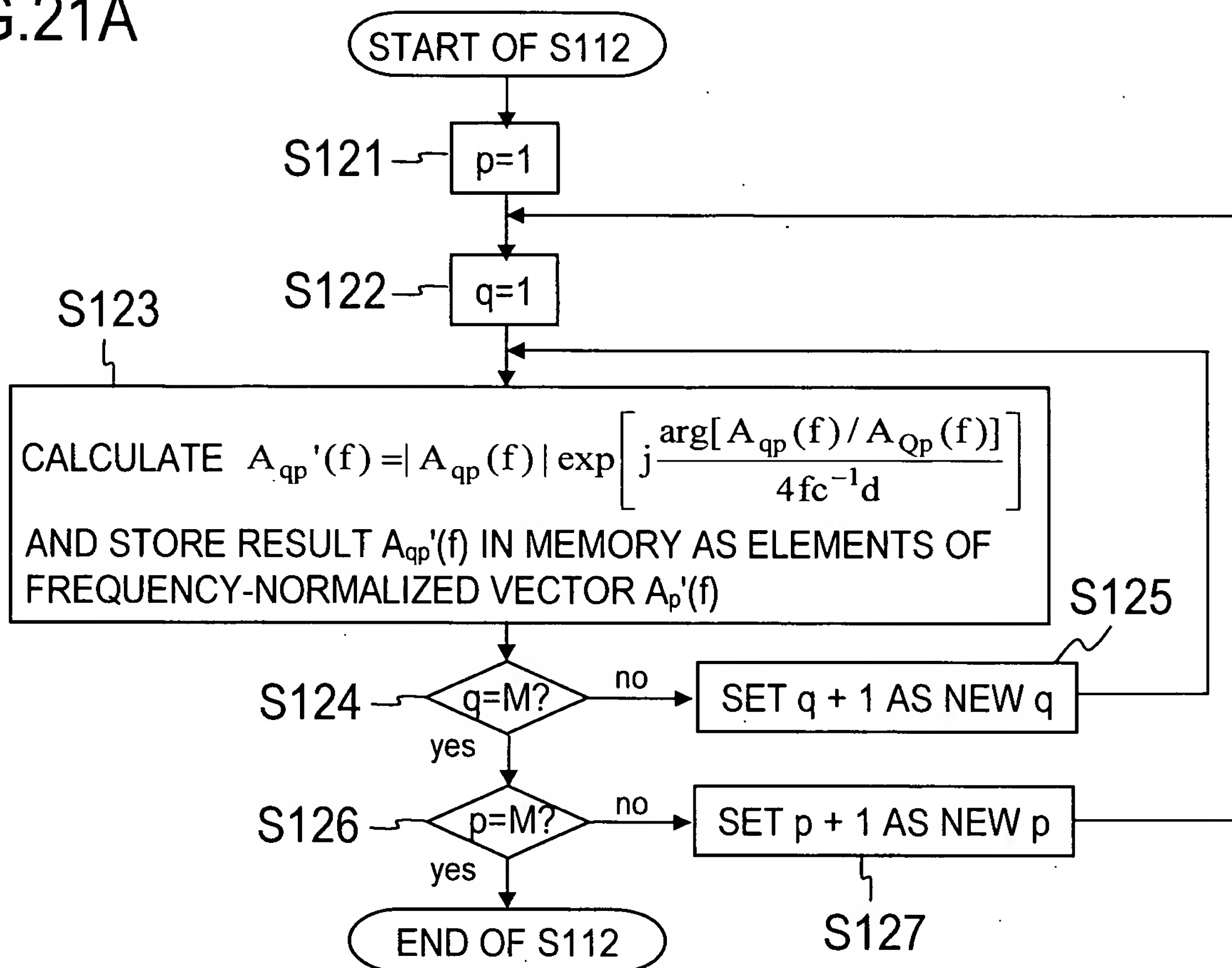


FIG.21B

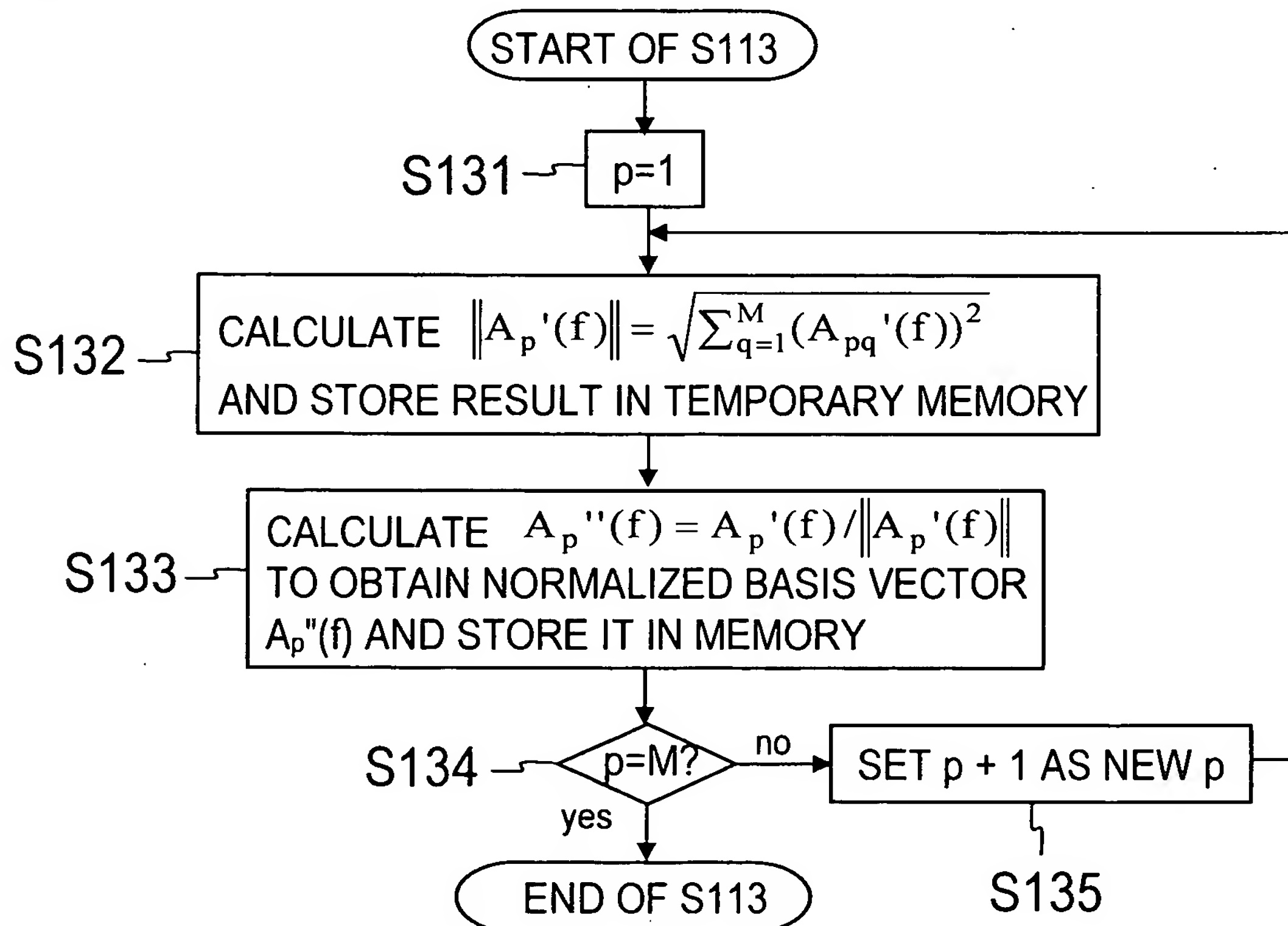


FIG.22

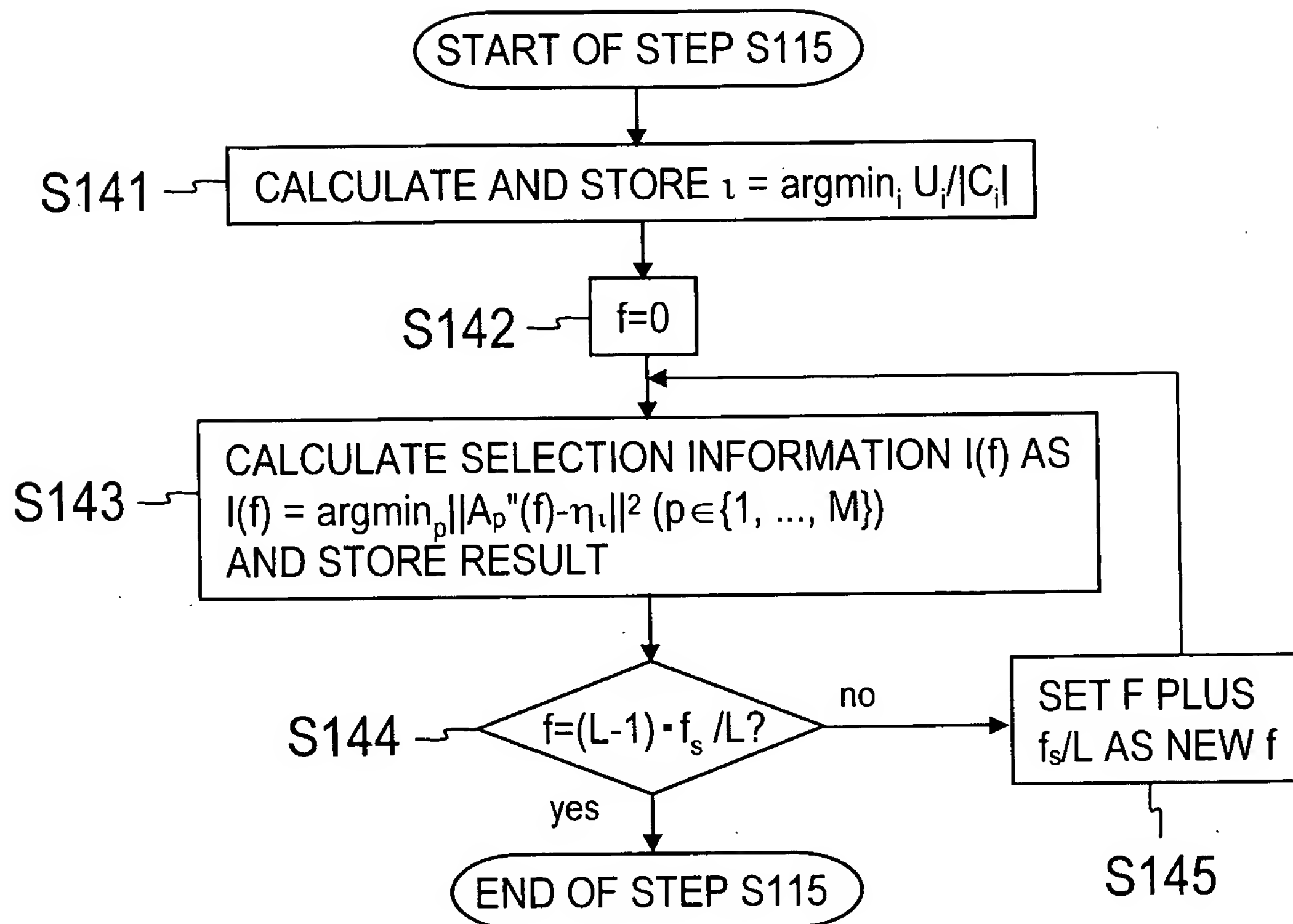


FIG.23

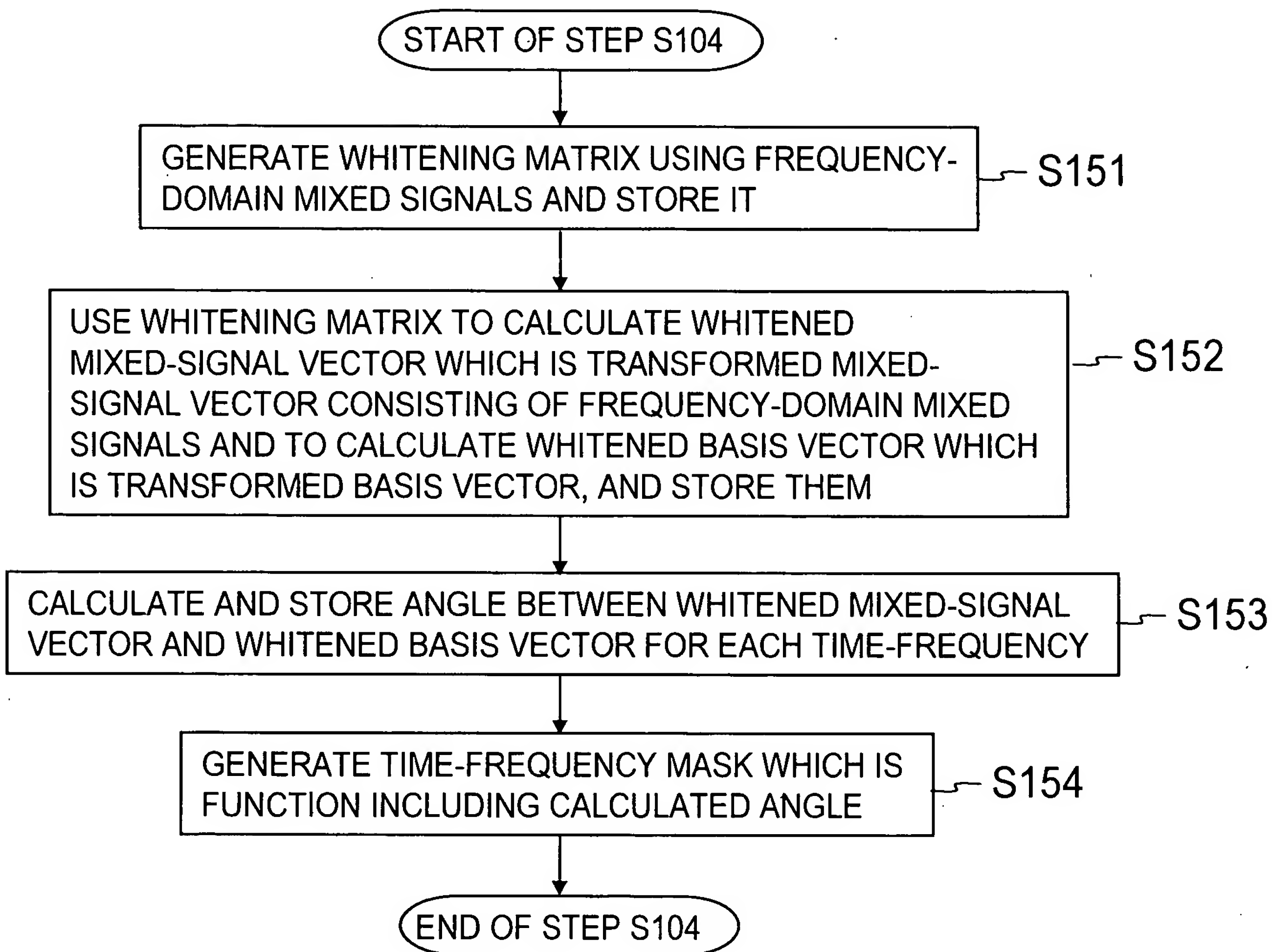


FIG.24A

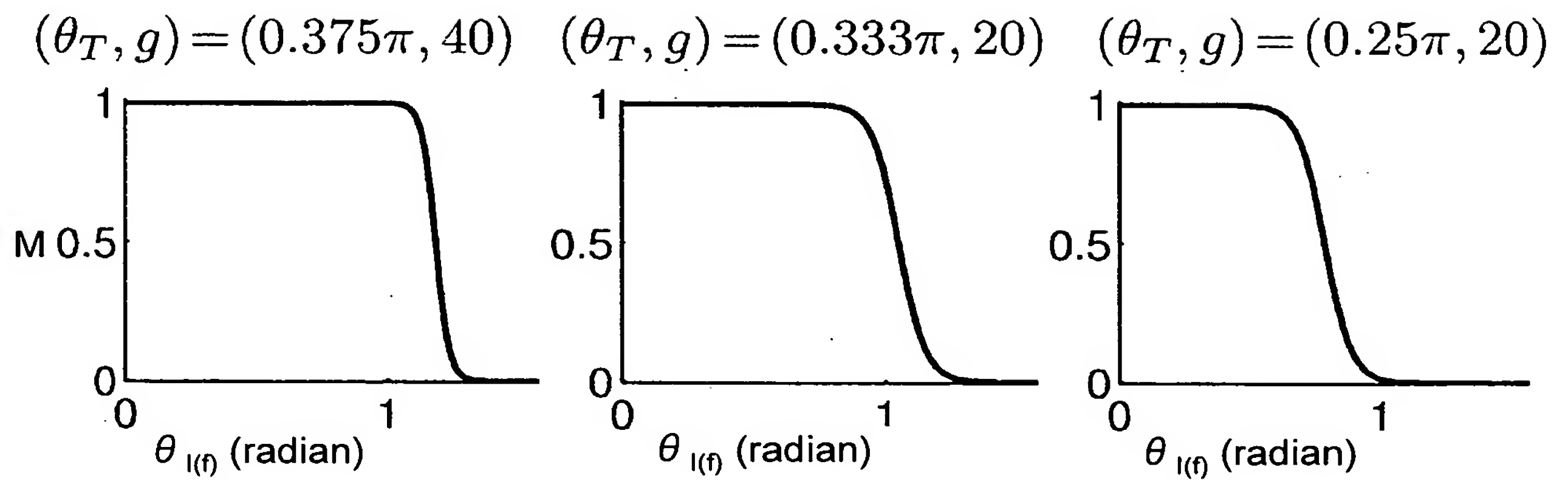


FIG.24B

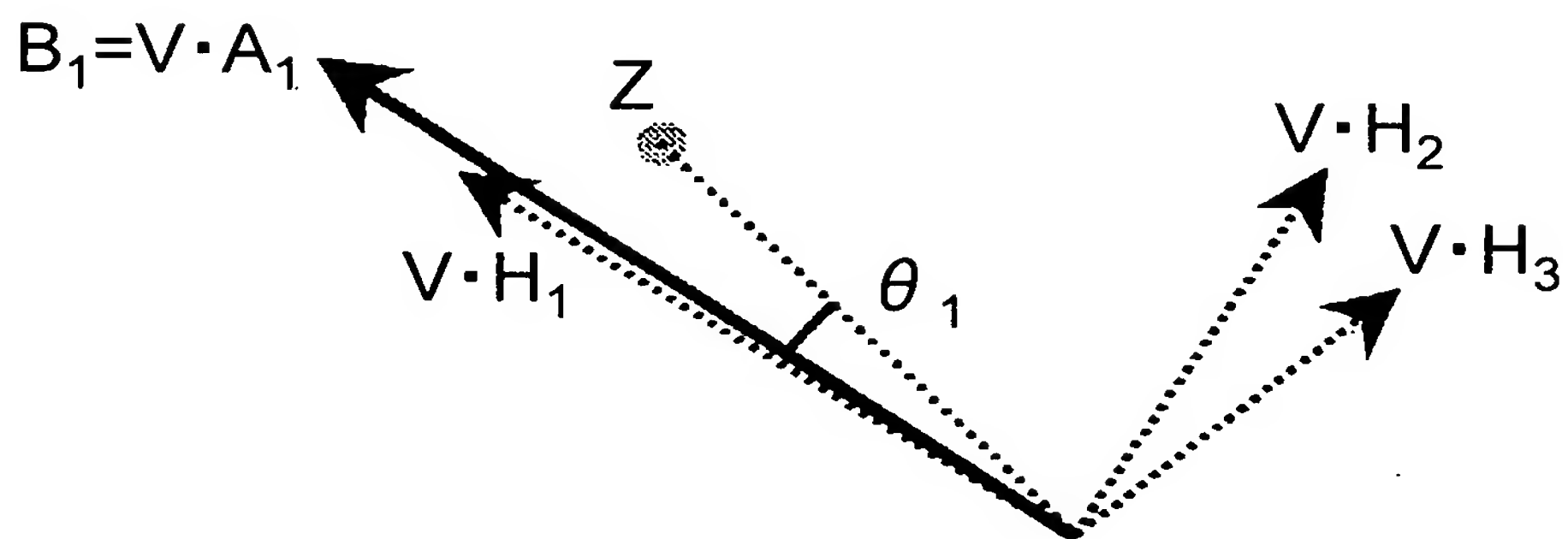


FIG.25

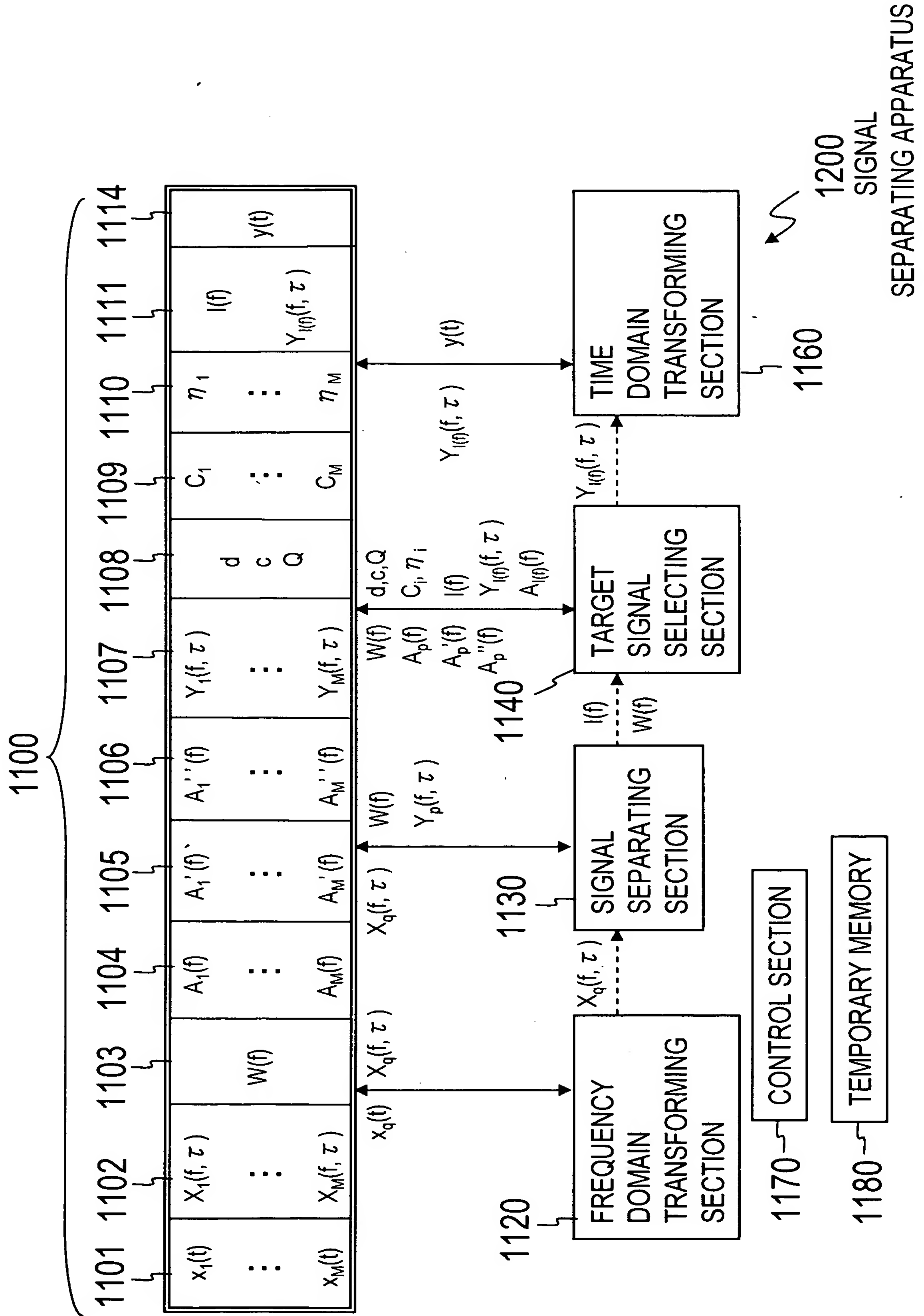


FIG.26

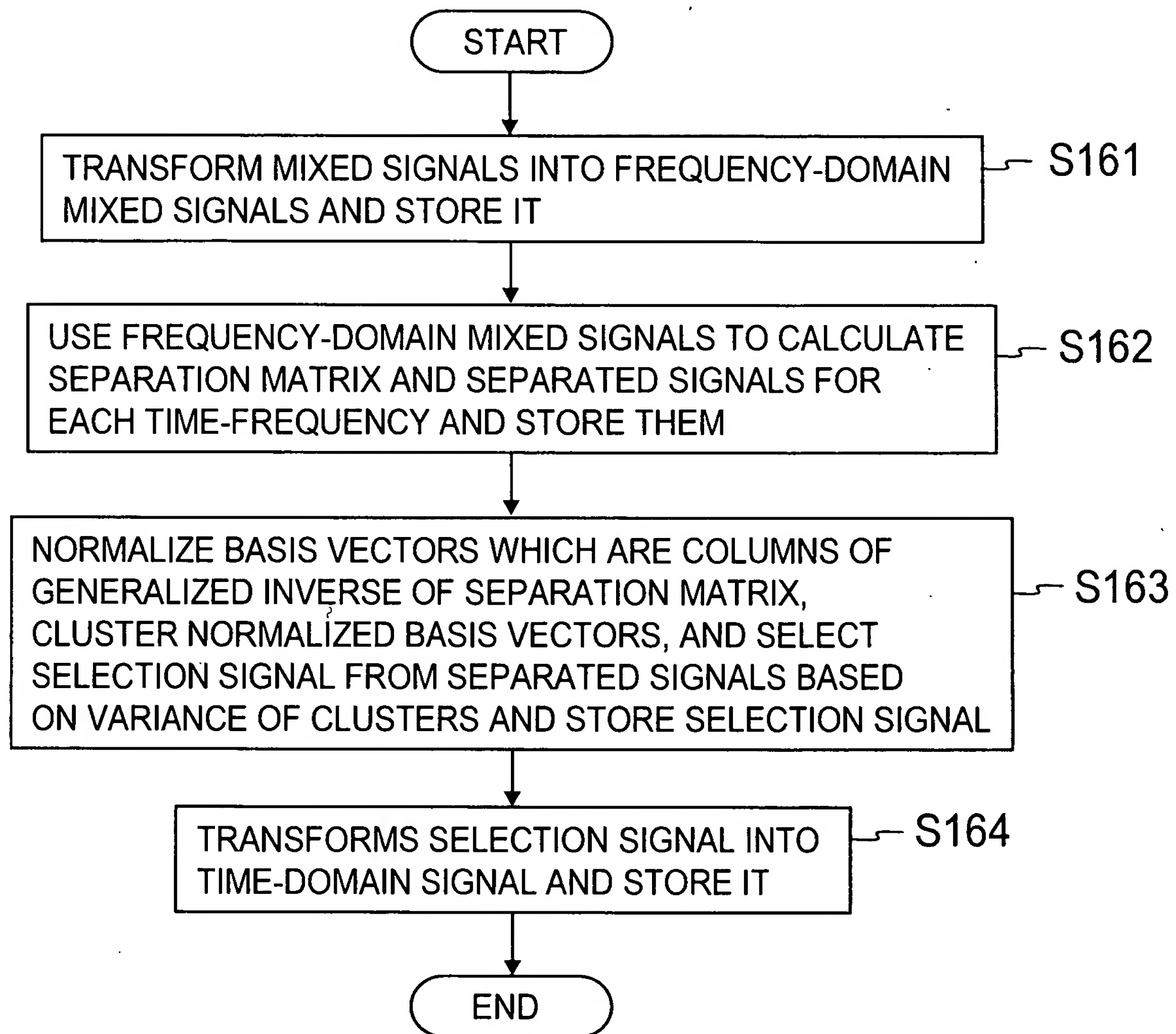
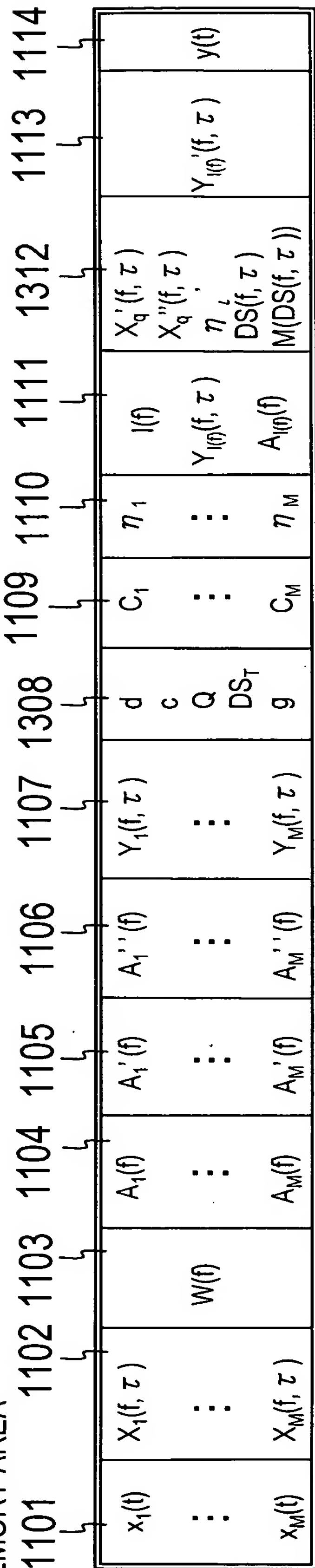


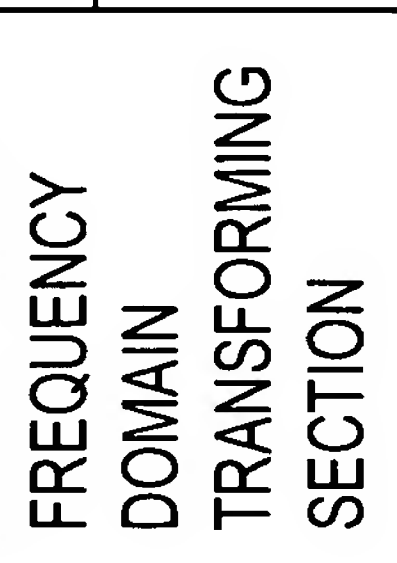
FIG. 27

1100 MEMORY

MEMORY AREA



1120



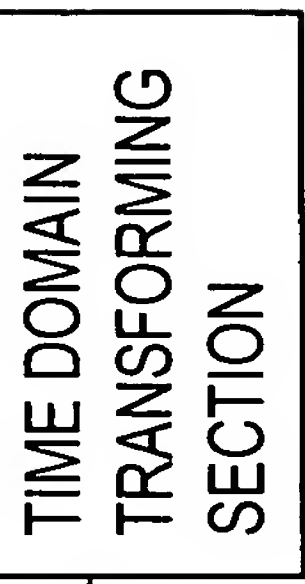
1130



1140



1350



1160



SIGNAL
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FIG.28A

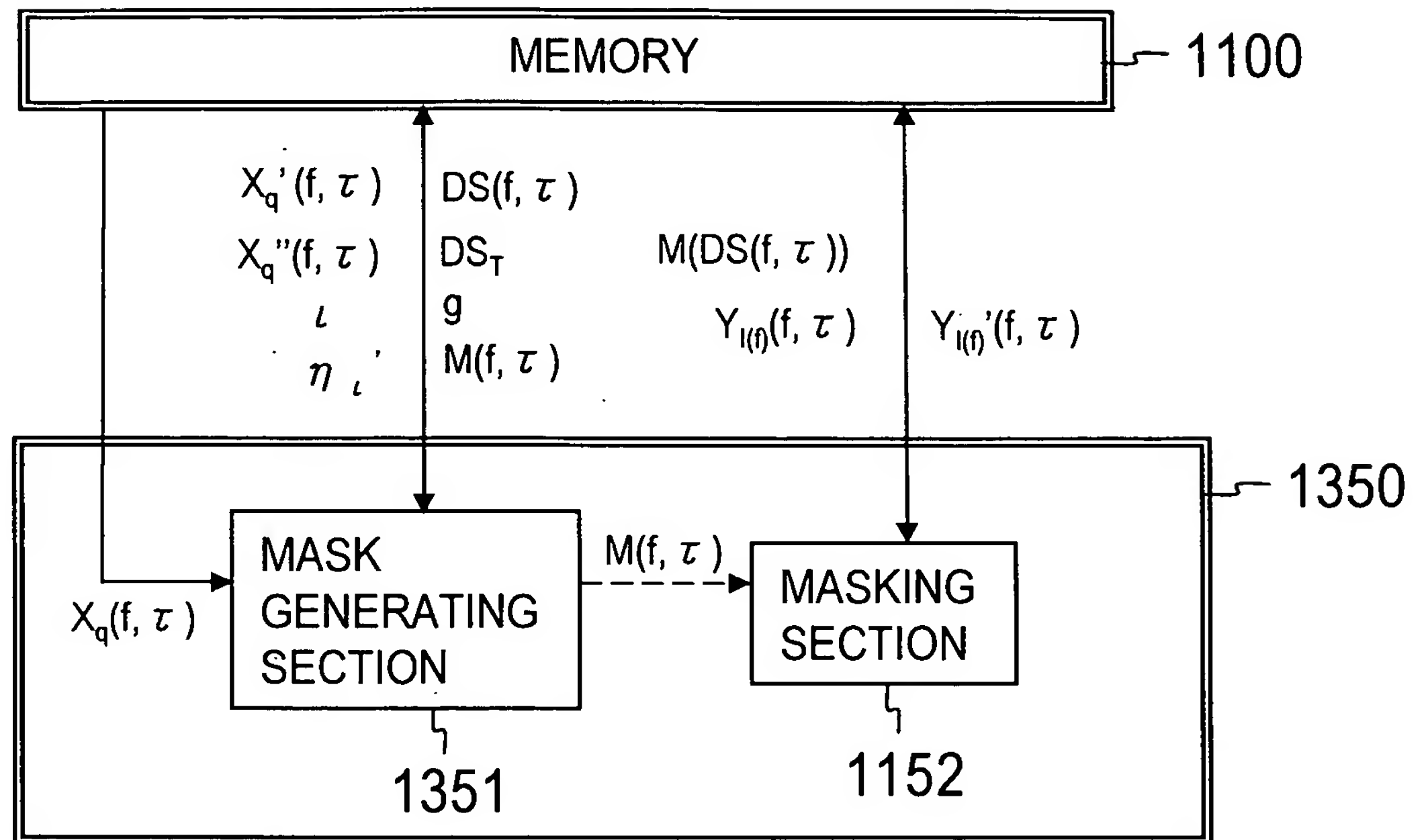


FIG.28B

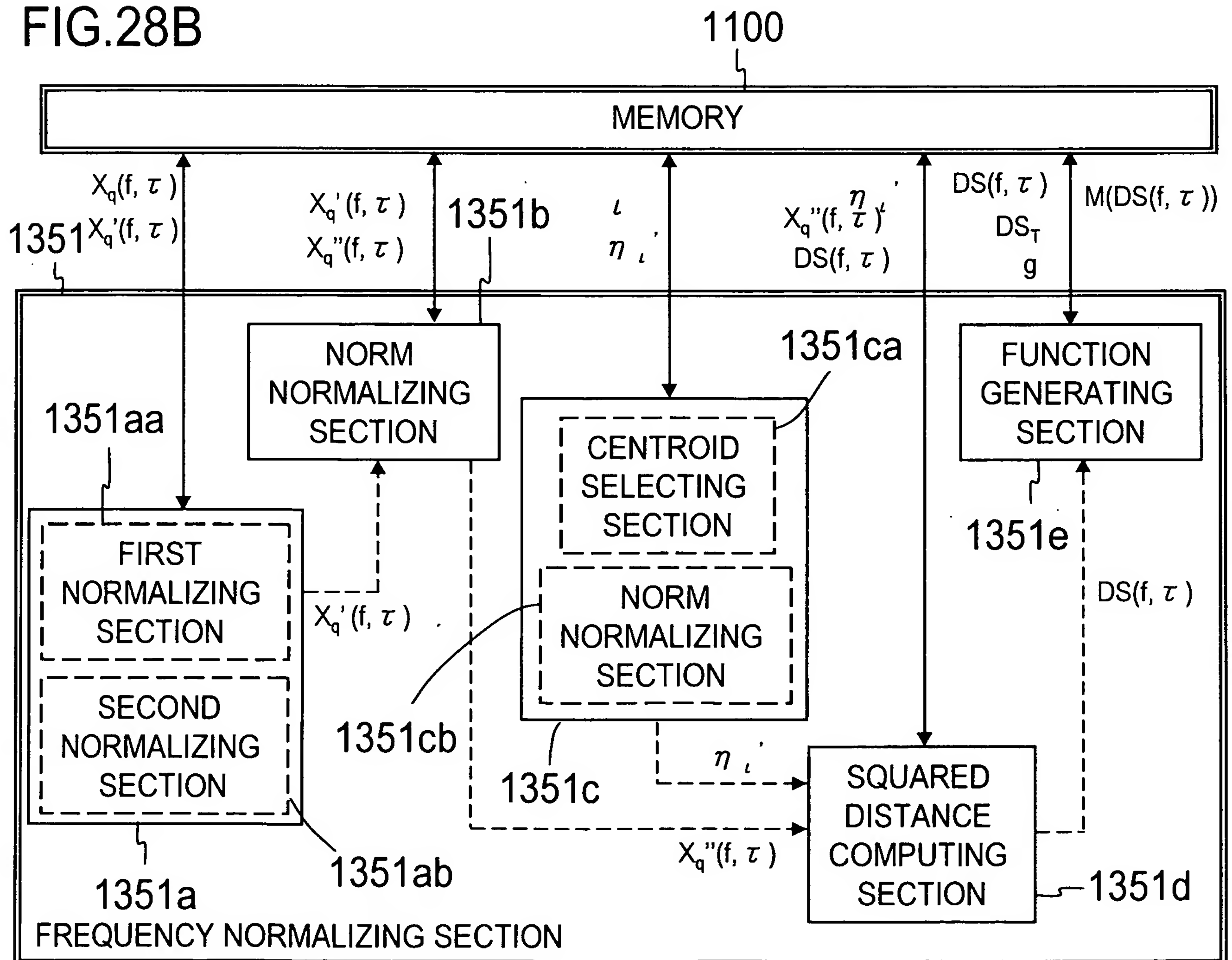


FIG.29

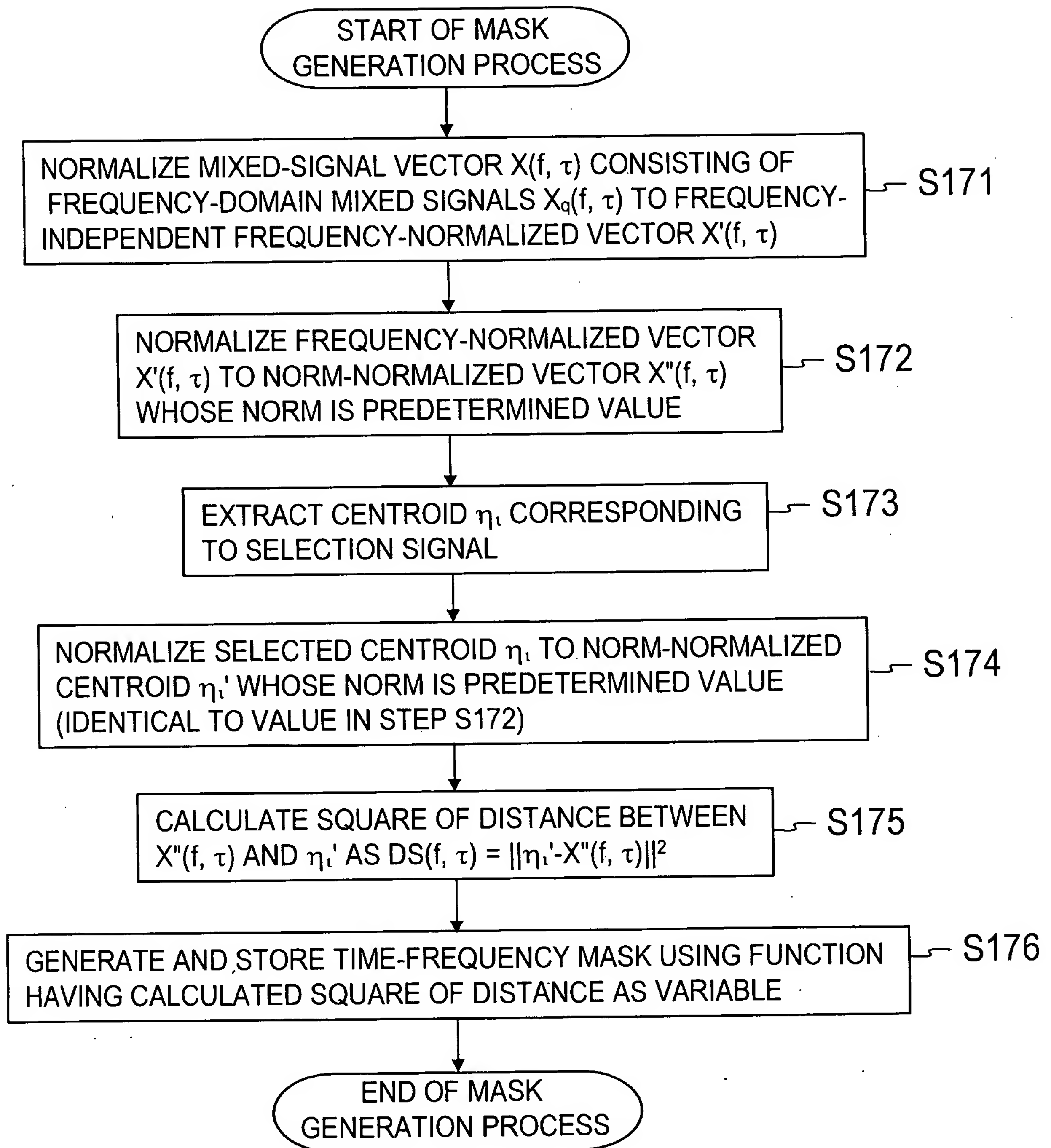


FIG.30A

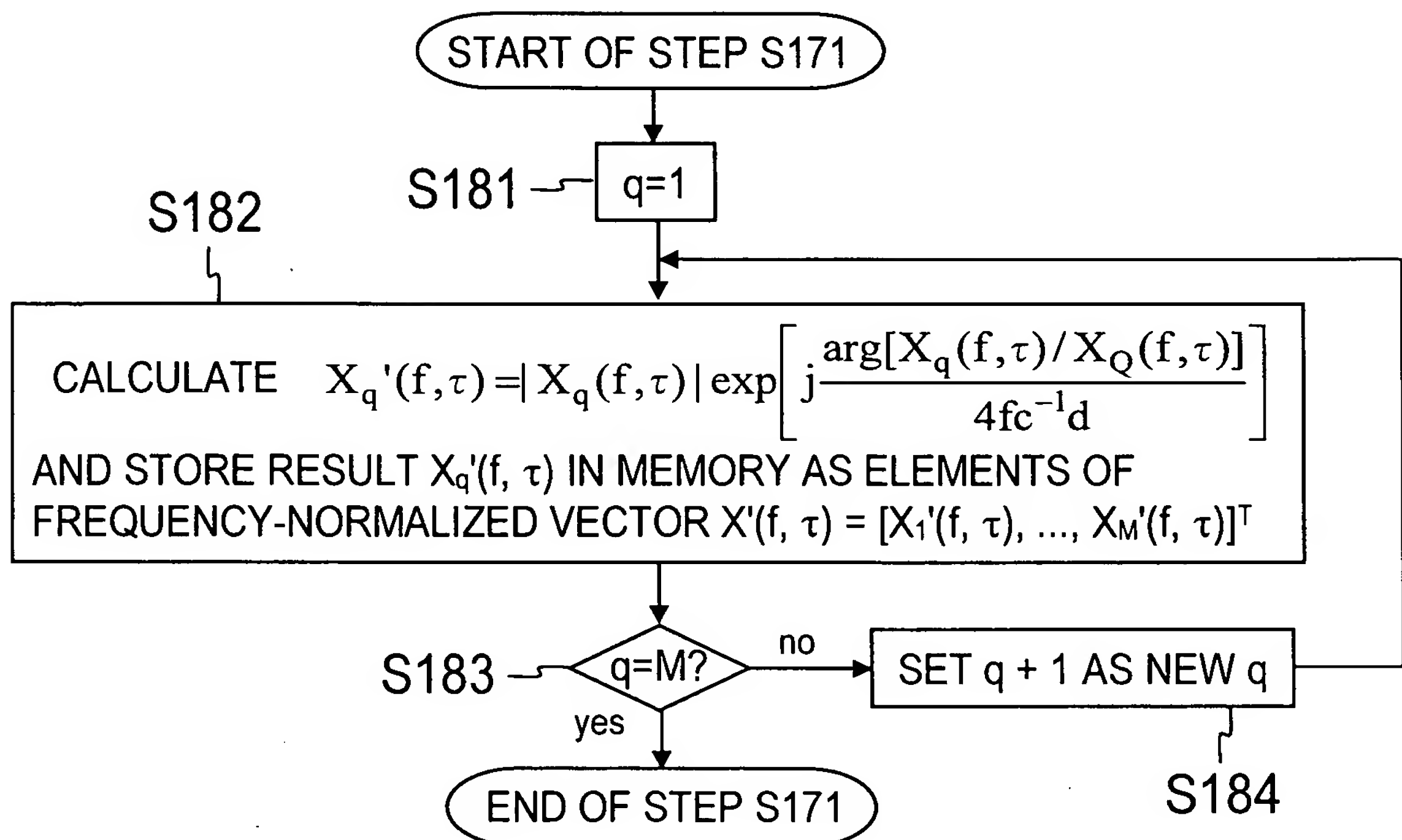


FIG.30B

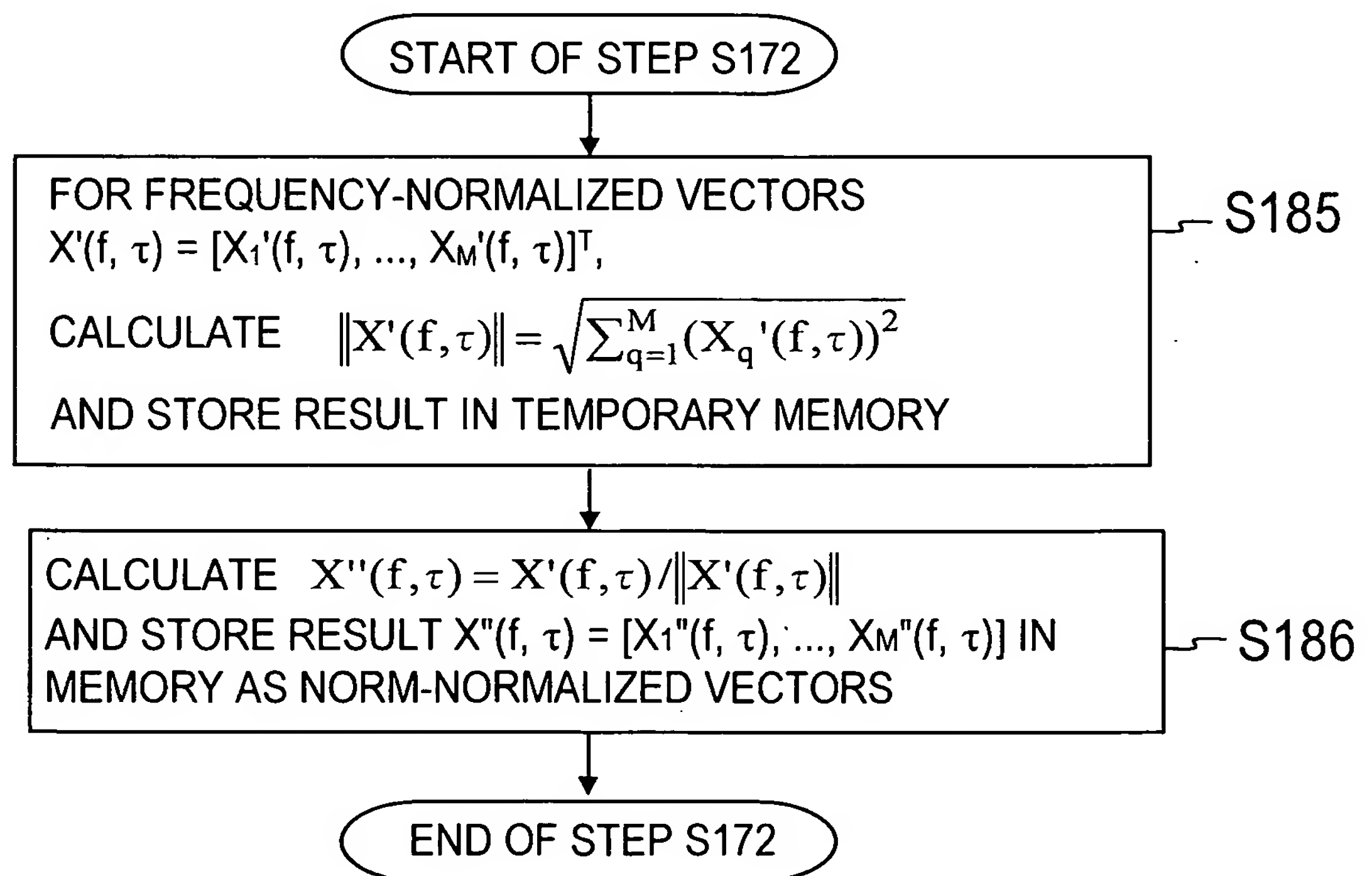


FIG.31A

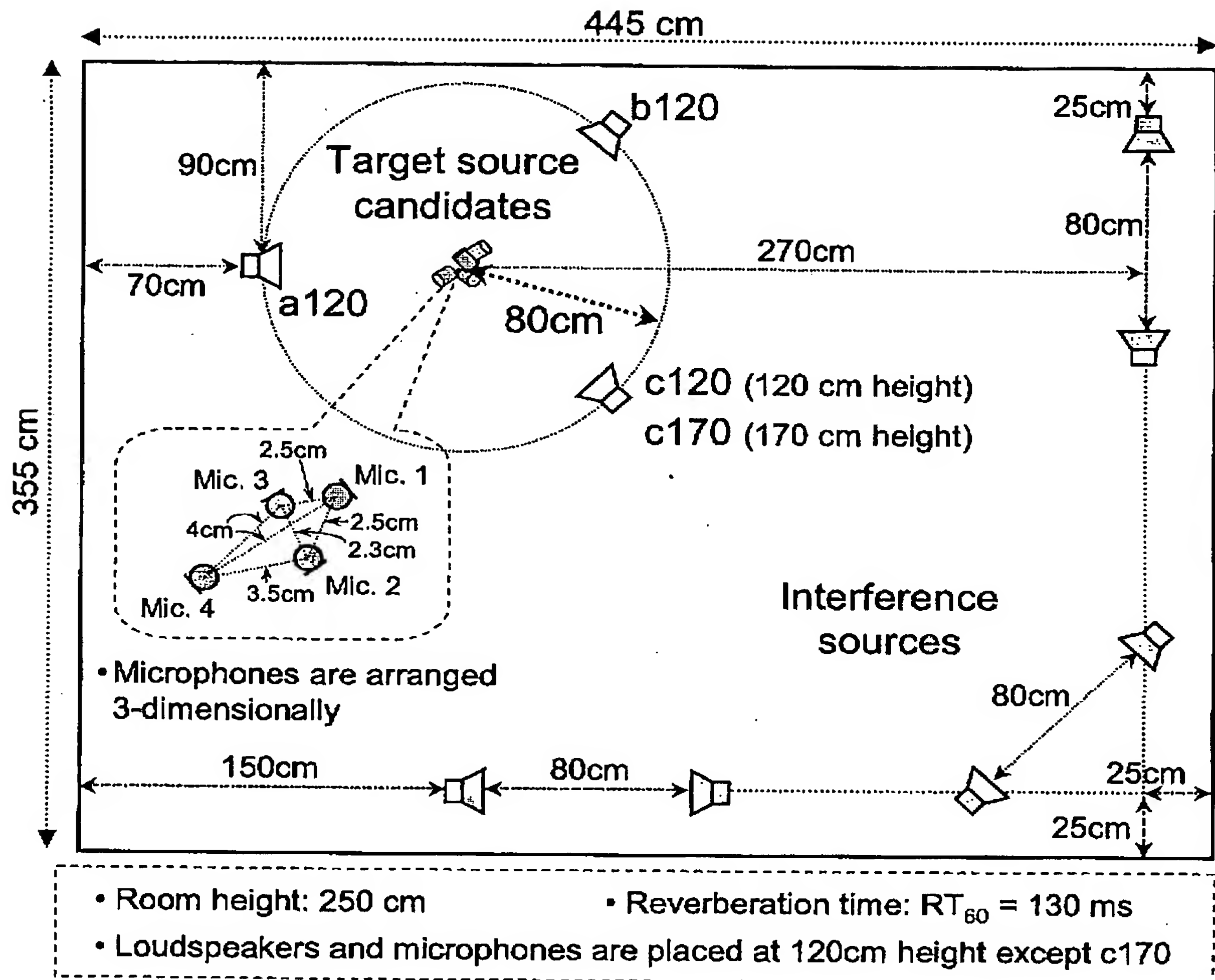


FIG.31B

TARGET SOUND POSITION	a120	b120	c120	c170
ICA ONLY	11.7dB	11.7dB	9.0dB	12.9dB
ICA WITH MASKING ($0.375\pi, 40$)	15.5dB	14.3dB	12.4dB	16.7dB
ICA WITH MASKING ($0.333\pi, 20$)	16.9dB	15.4dB	14.0dB	18.1dB
ICA WITH MASKING ($0.25\pi, 20$)	19.7dB	17.9dB	16.9dB	20.8dB

FIG.32

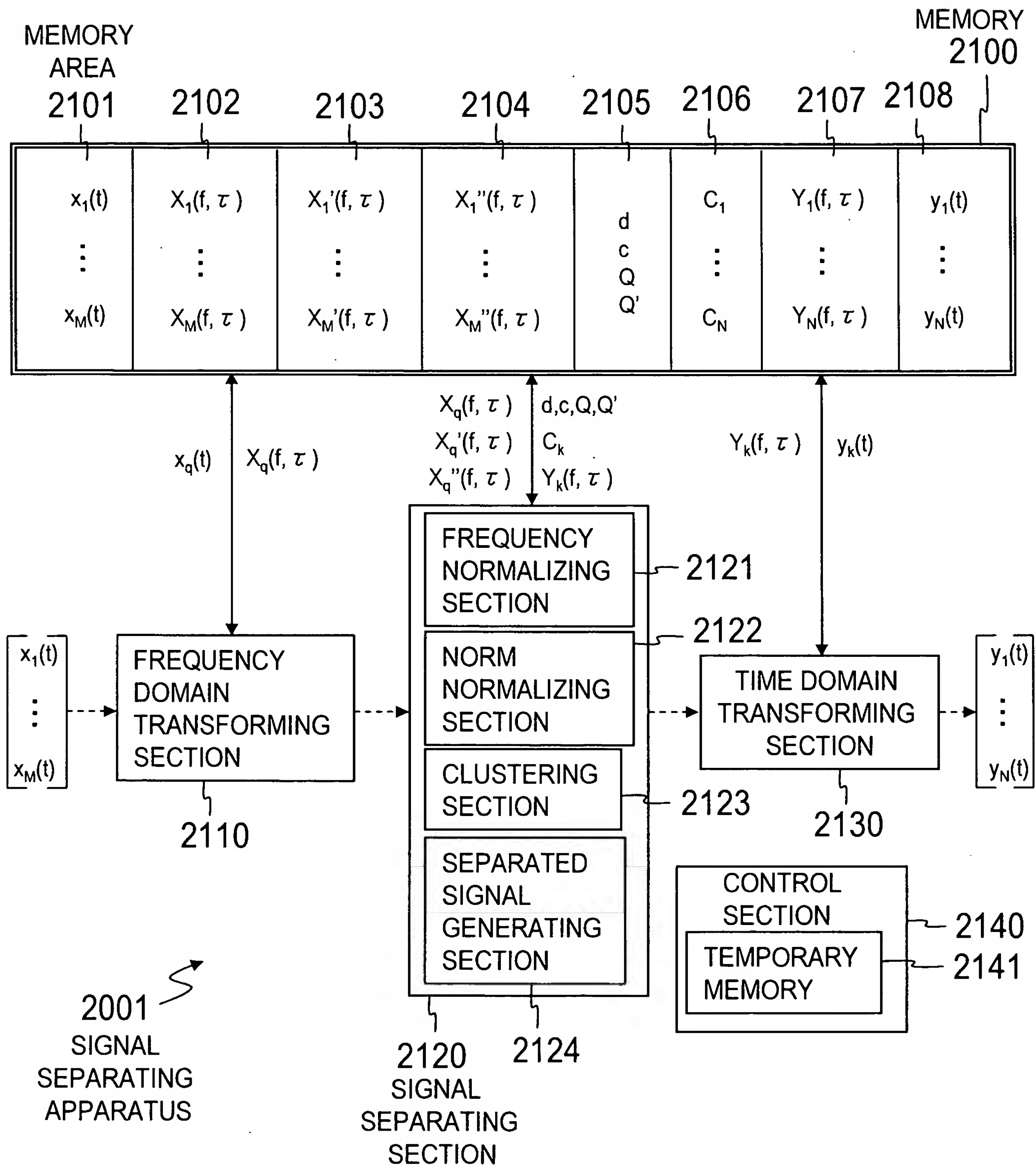


FIG.33

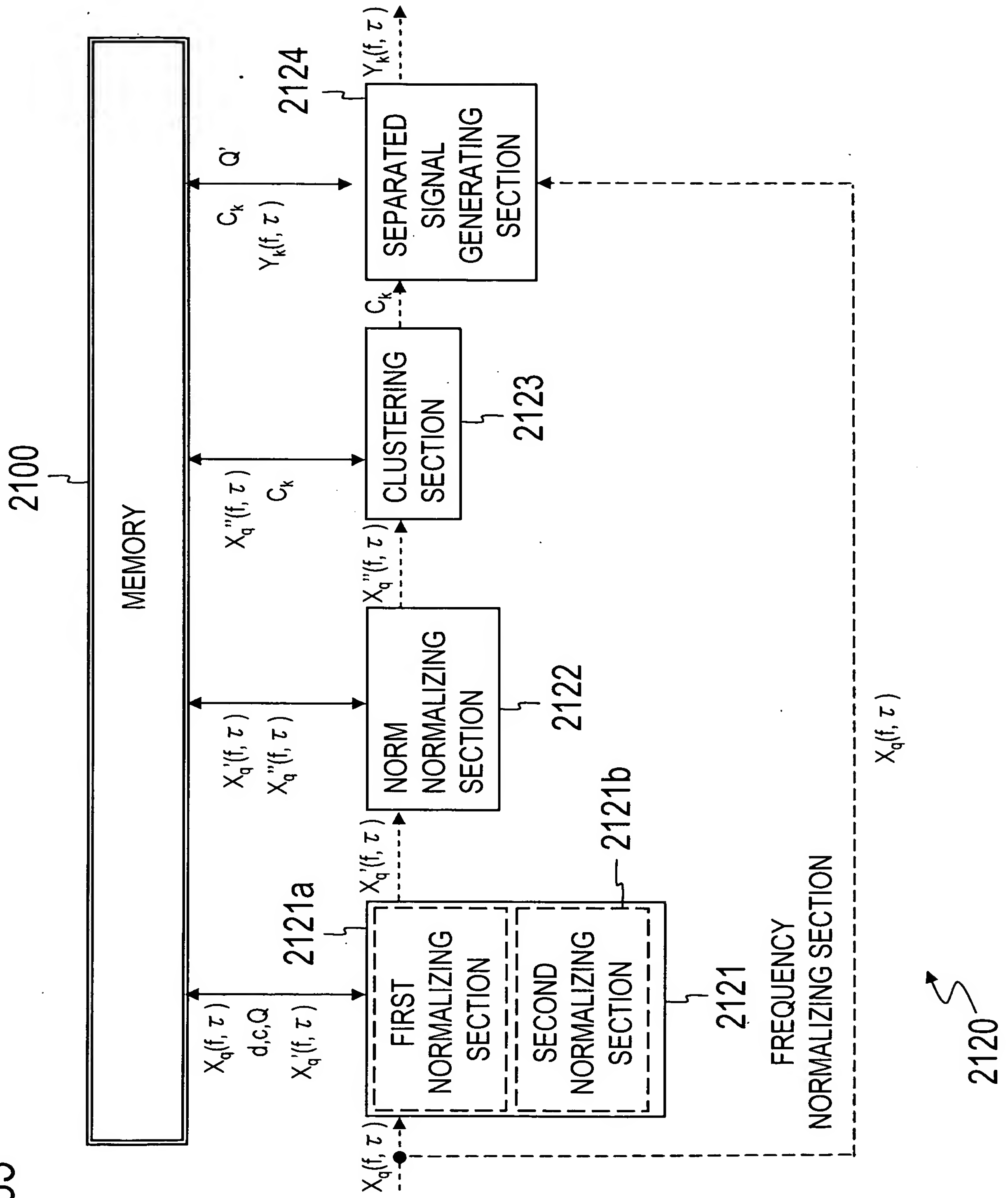


FIG.34

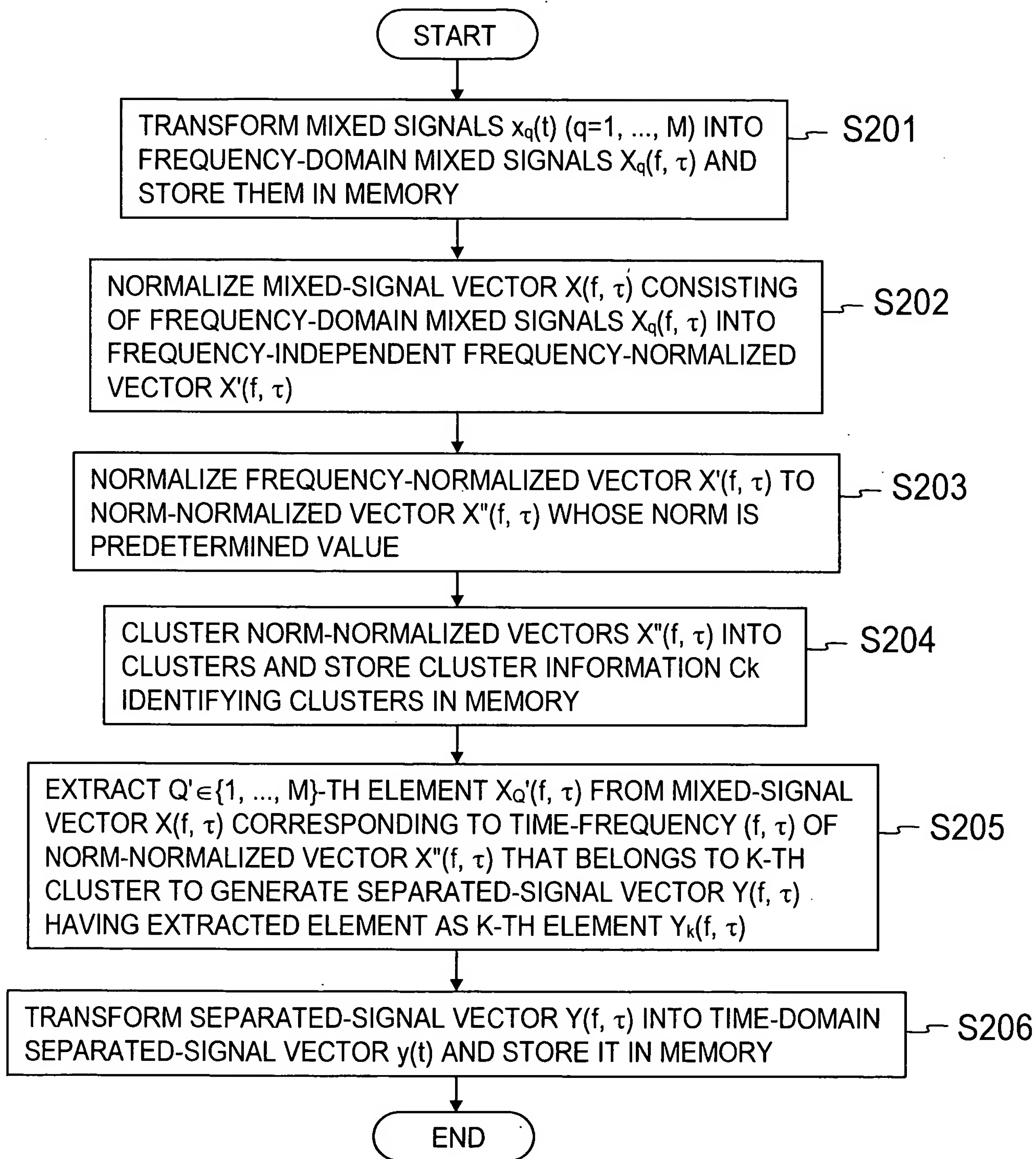


FIG.35A

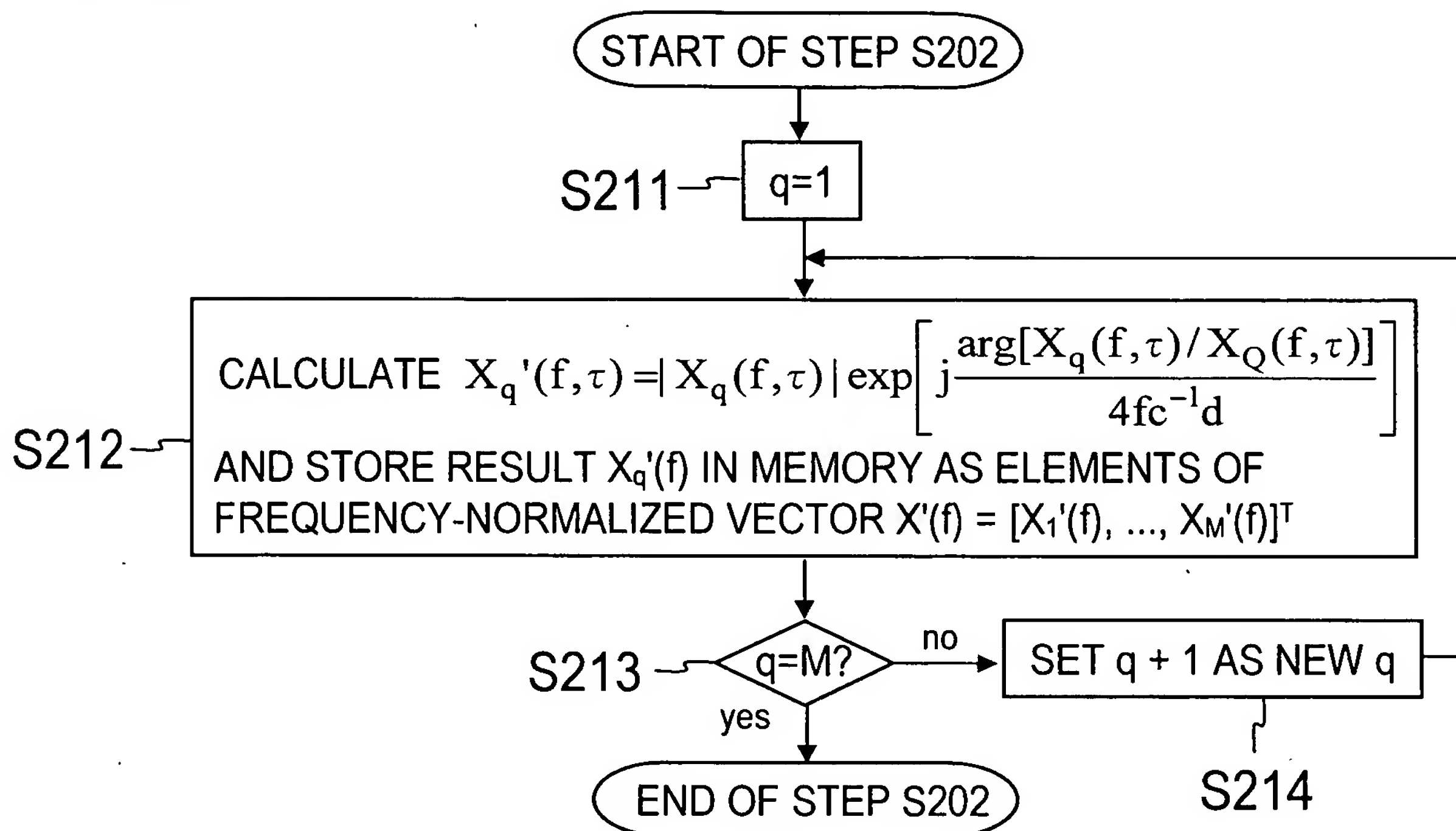


FIG.35B

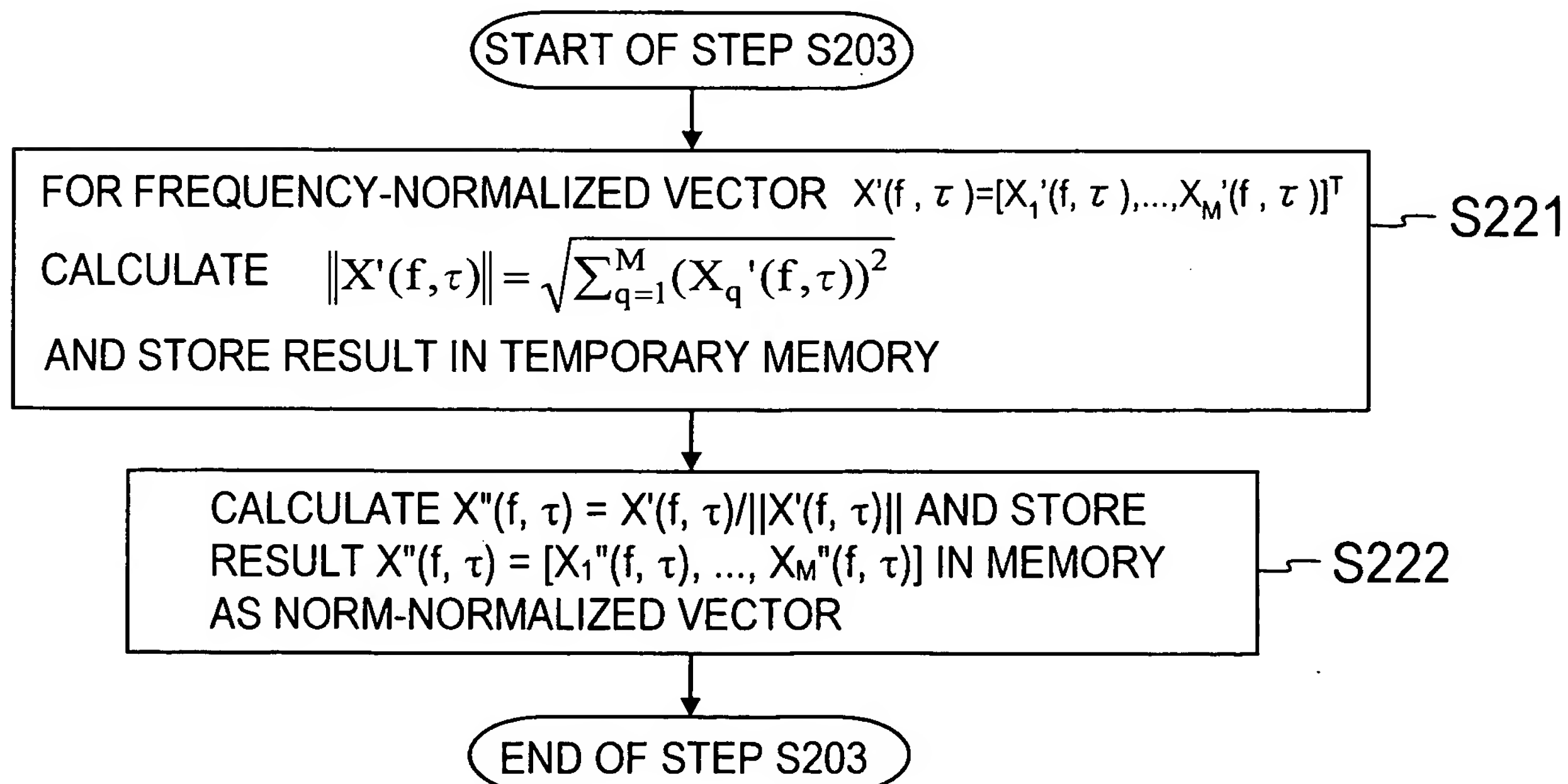


FIG.36

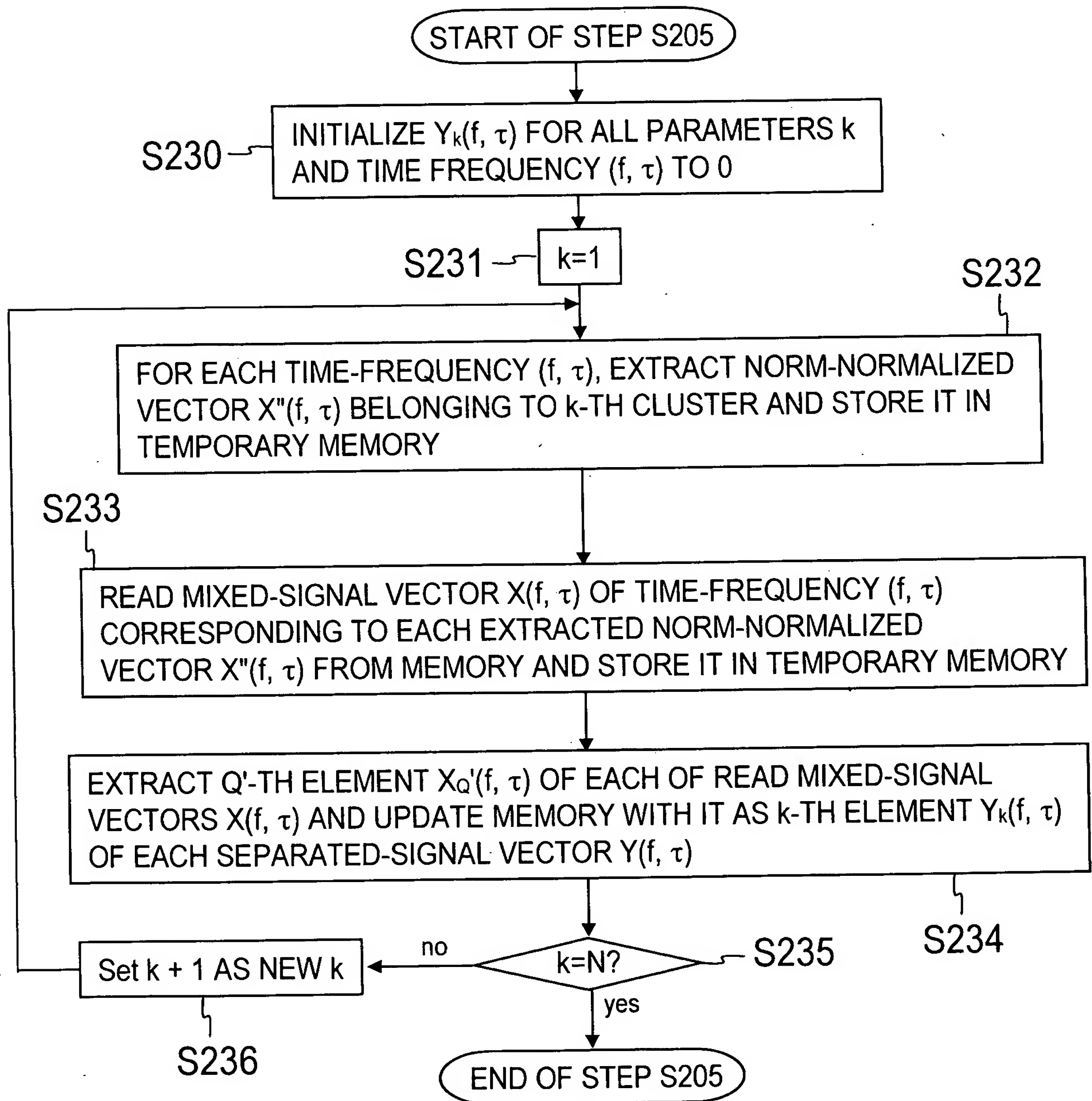


FIG.37A

WHEN $d_{\max}/2 \geq d$

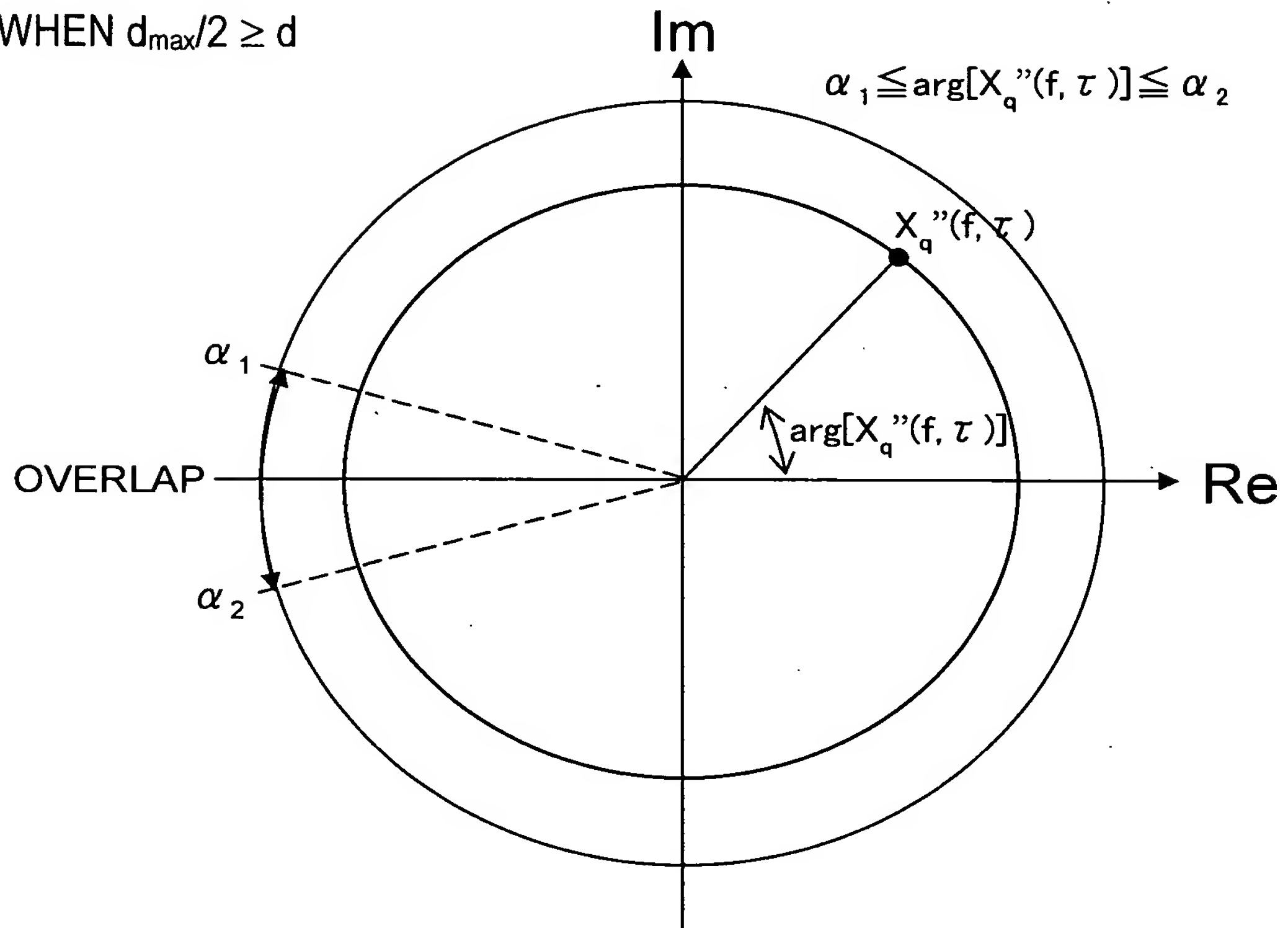


FIG.37B

WHEN $d_{\max}/2 < d < d_{\max}$

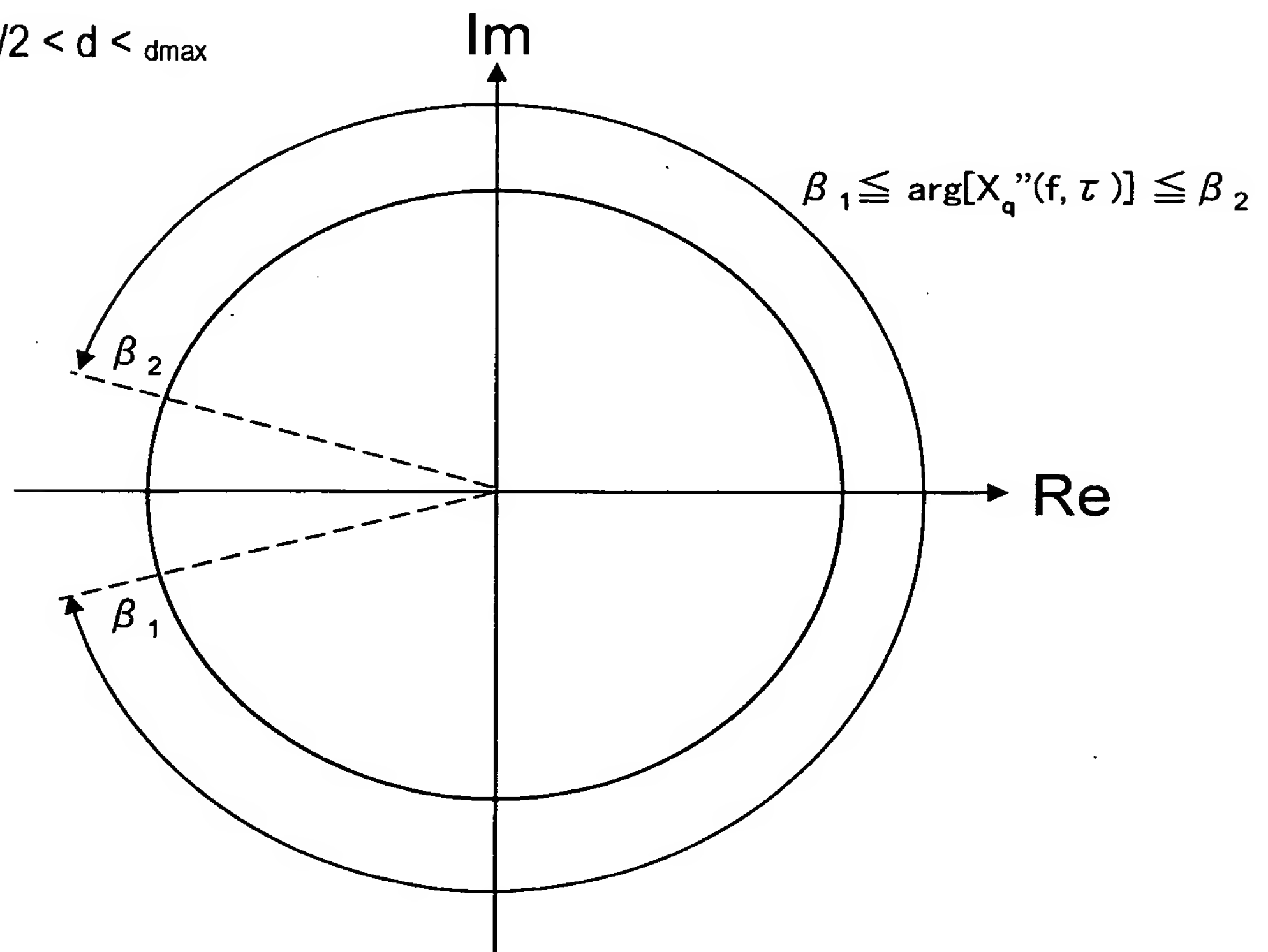


FIG.38A

WHEN $d = d_{\max}$

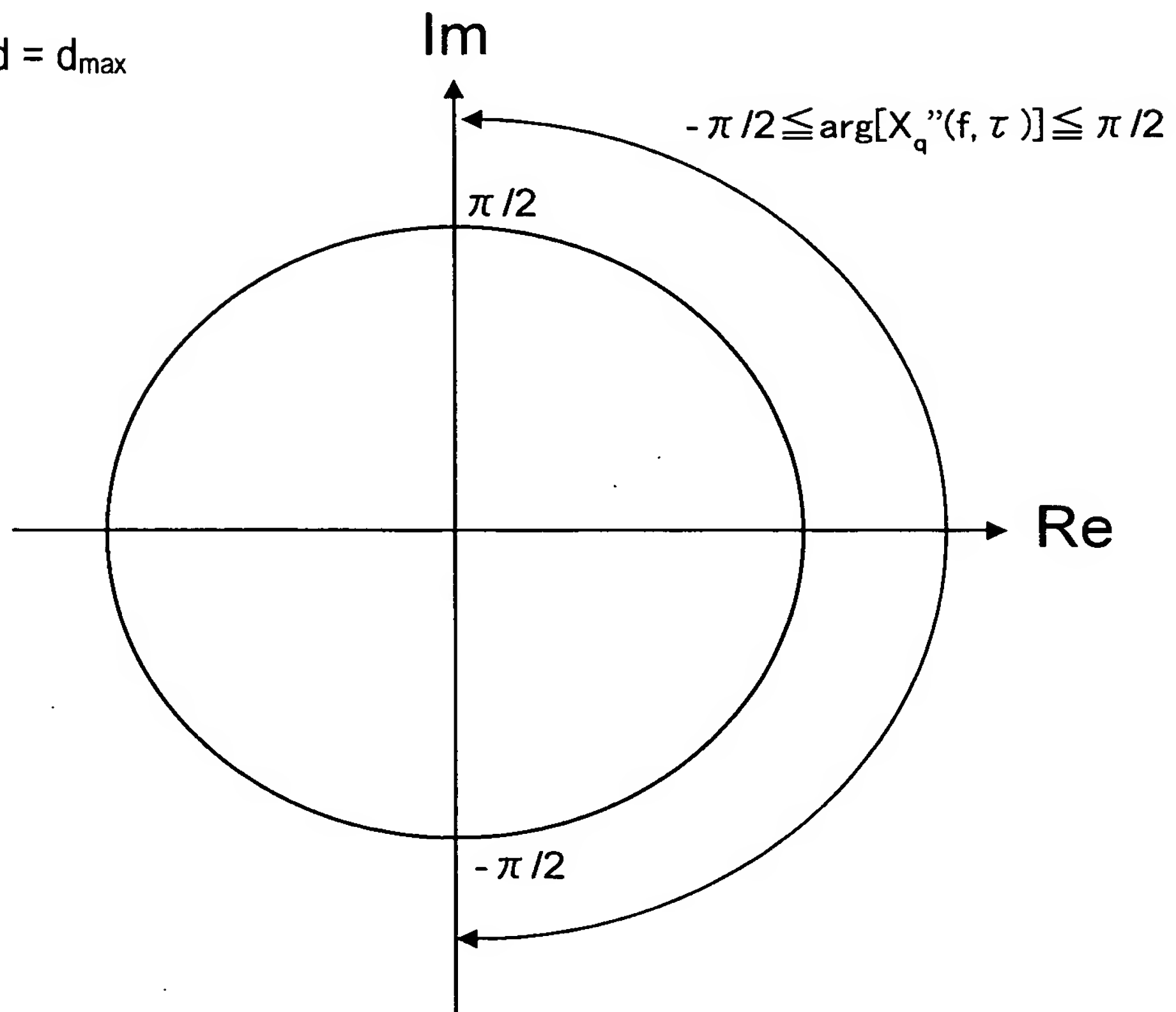


FIG.38B

WHEN $d > d_{\max}$

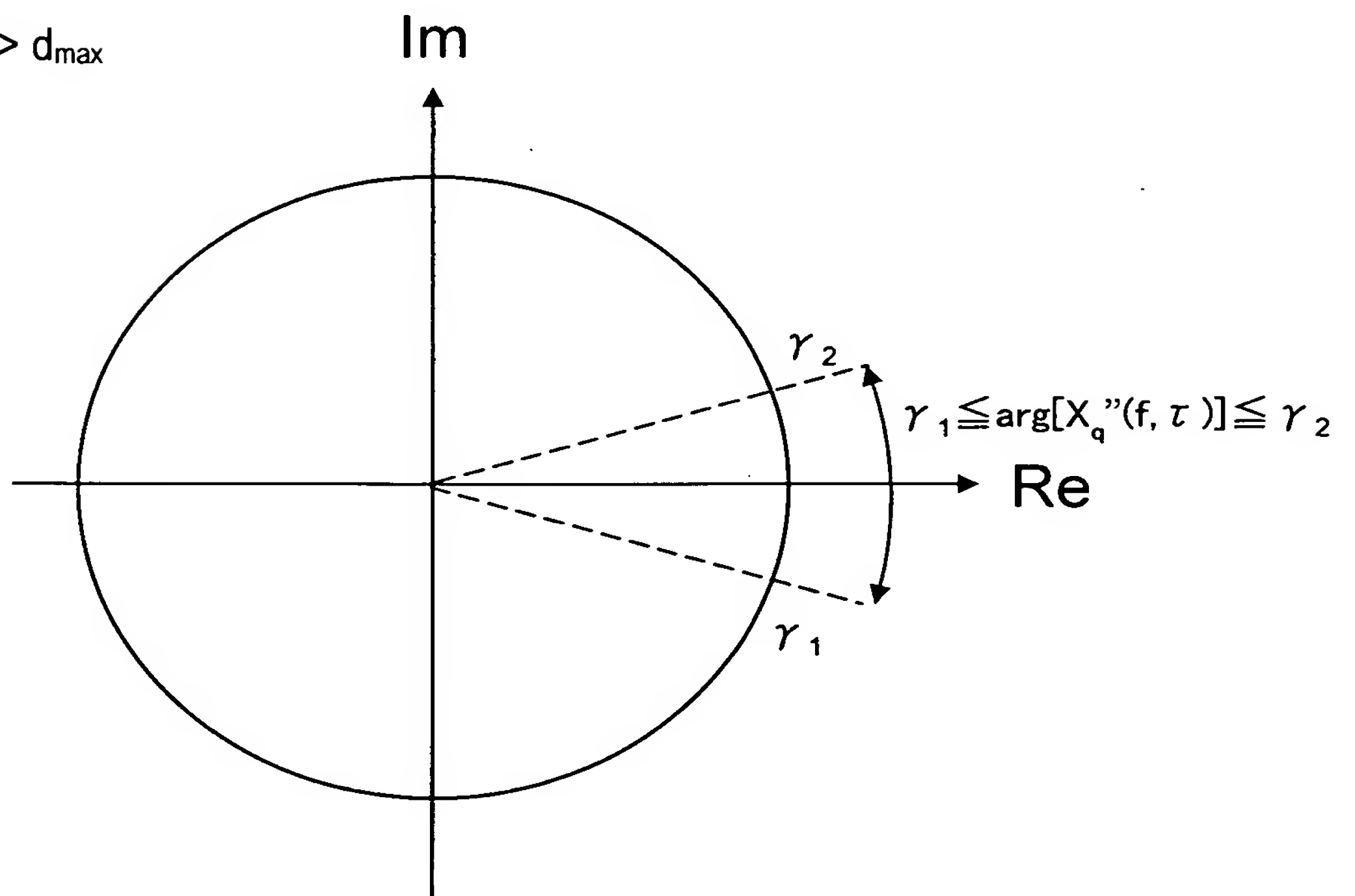


FIG.39A

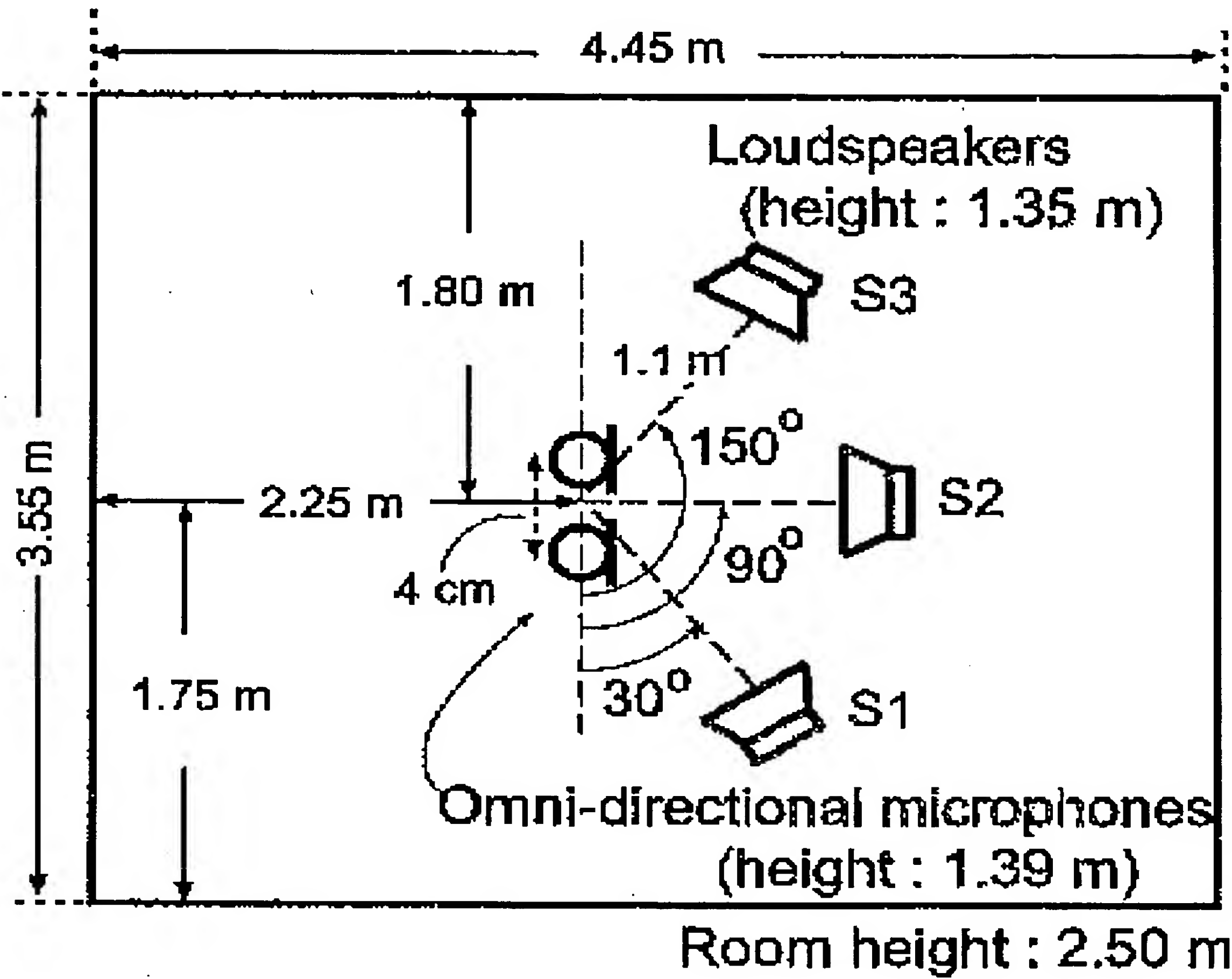


FIG.39B

EXPERIMENTAL RESULTS(in[dB])

	SIR ₁	SIR ₂	SIR ₃
InputSIR	-5.2	-1.5	-2.9
DOA (Previous)	17.7	6.3	12.7
Normalized obser. vector (Proposed)	16.4	6.0	13.0

FIG.40A

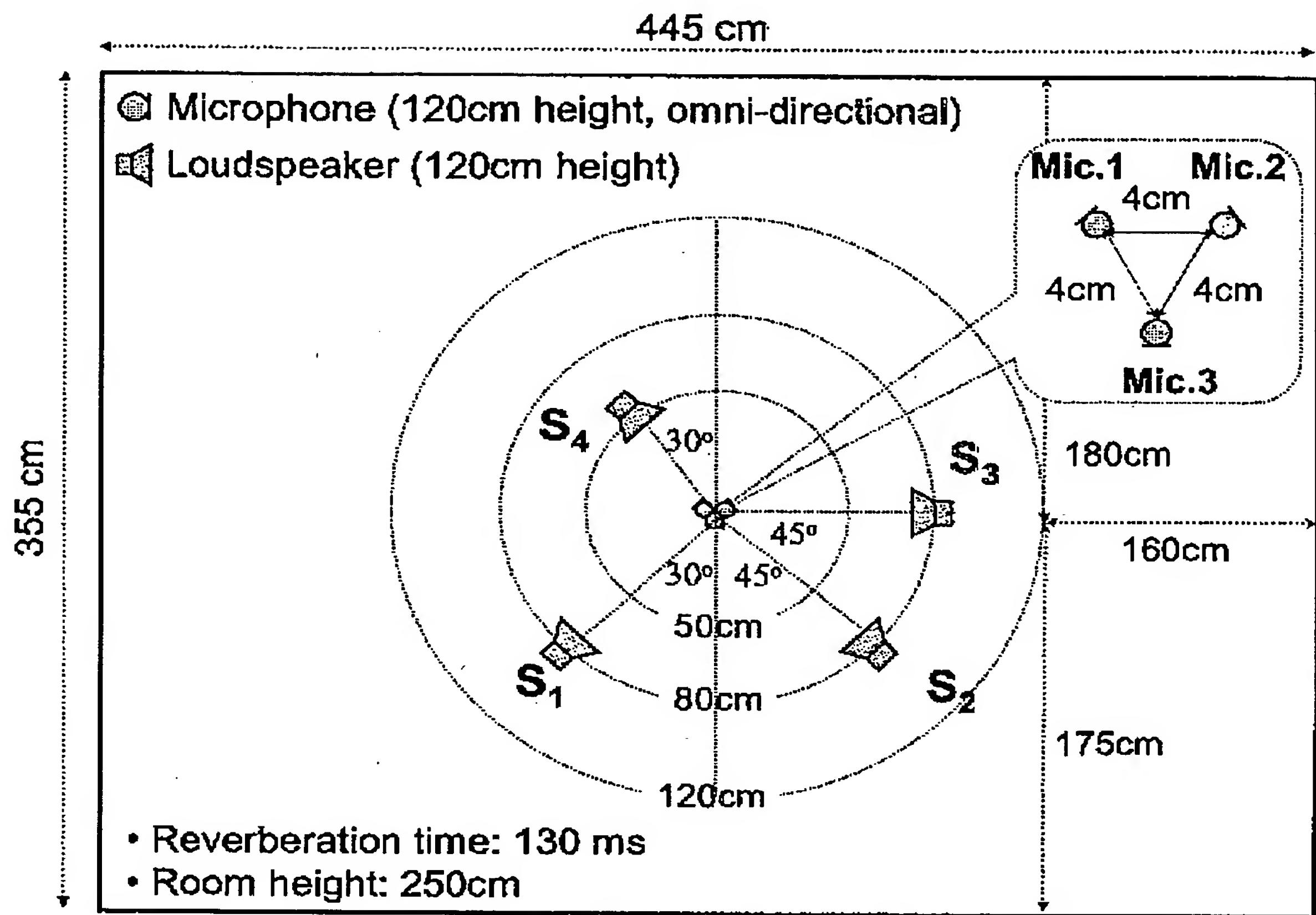


FIG.40B

EXPERIMENTAL RESULTS (in[dB])

	SIR_1	SIR_2	SIR_3	SIR_4
InputSIR	-8.1	-6.0	-5.9	-0.8
Proposed	16.8	10.6	14.5	10.8

FIG.41A

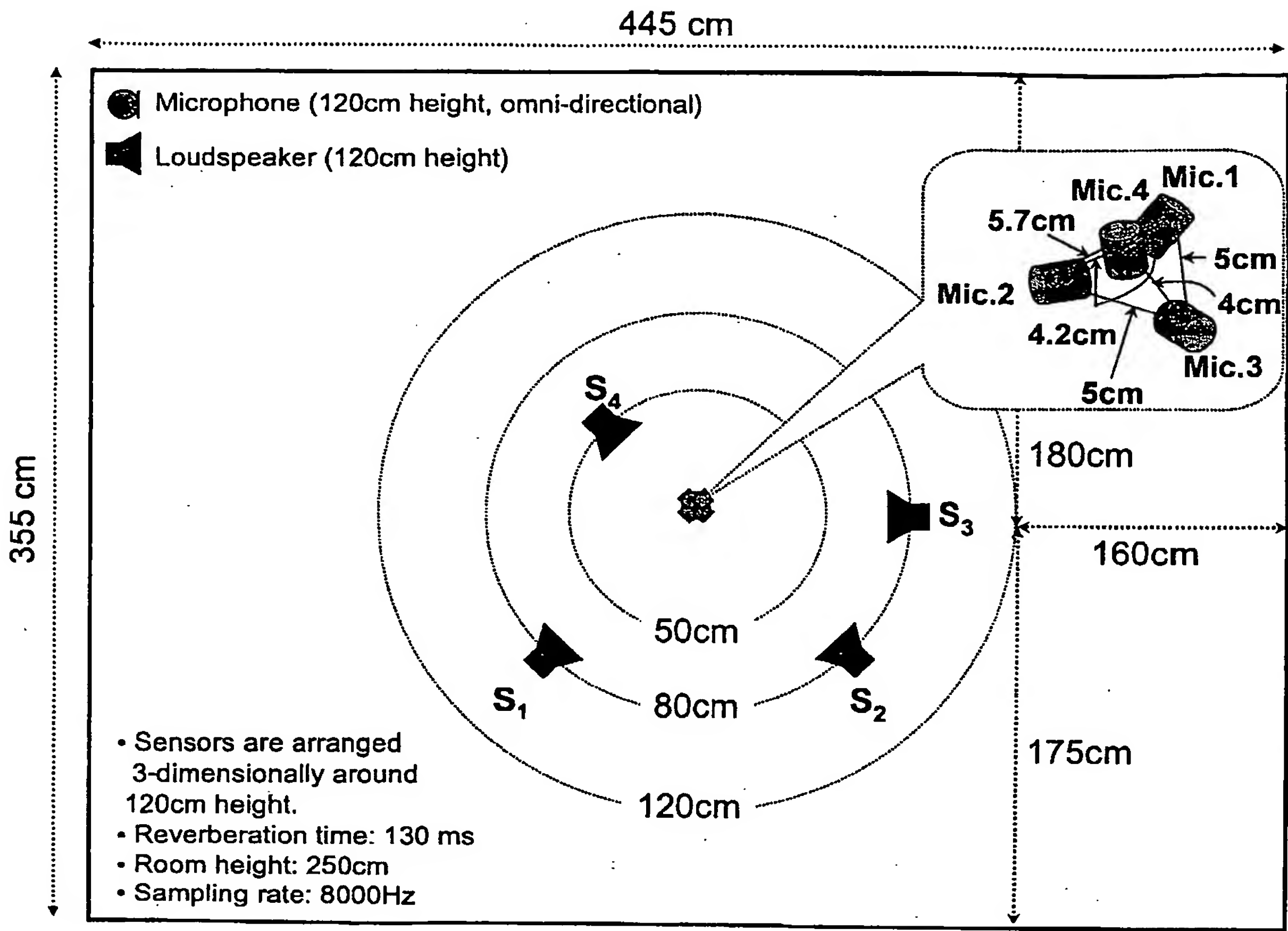


FIG.41B

EXPERIMENTAL RESULTS (in[dB])

	SIR ₁	SIR ₂	SIR ₃	SIR ₄
InputSIR	-8.1	-5.3	-6.6	-0.6
Proposed	17.8	15.6	9.6	15.7